EASTERN KENTUCKY STATE COLLEGE

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Richmond, Kentucky

EASTERN KENTUCKY STATE COLLEGE

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PRE-PROFESSIONAL CURRICULA

GRADUATE DIVISION

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American Association of University Women

and

American Council on Education

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1949

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1949—CALENDAR—1950

FIRST SEMESTER

September 14	Wednesday	8:30 a. m.	Classification tests for first semester freshmen
September 15	Thursday	8:30 a. m.	Classification tests for first semester freshmen
September 16	Friday	8:00 a. m.	Registration of freshmen
September 17	Saturday	8:00 a. m.	Registration of upperclass students
September 19	Monday		Classes begin
September 26	Monday		Last day to enter a course for credit with a reduced load
October 24	Monday		Last day on which a course may be dropped without a grade
November 16	Wednesday	10:00 a. m.	Mid-semester reports to Registrar
November 23	Wednesday	5:00 p. m.	School closes for Thanksgiving Holiday
November 28	Monday	8:00 a. m.	Class work resumed
December 17	Saturday	Noon	Christmas Holiday begins
January 2	Monday	8:00 a. m.	Class work resumed
January 26	Thursday	5:00 p. m.	First semester closes
January 27	Friday	Noon	Grades to Registrar

SECOND SEMESTER

January 30	Monday	8:00 a. m.	Registration
January 31	Tuesday	8:00 a. m.	Registration
February 1	Wednesday		Classes begin
February 7	Tuesday		Last day to enter a class for credit with a reduced load
March 6	Monday		Last day on which a course may be dropped without a grade
April 3	Monday	9:00 a. m.	Mid-semester reports to Registrar
April 20, 21, 22,	Thursday, Friday, Saturday,		KEA, Spring Vacation
May 28	Sunday		Baccalaureate
May 31	Wednesday		Commencement
June 1	Thursday	5:00 p. m.	Second semester ends

SUMMER SCHOOL—1950

June 5	Monday	8:00 a. m.	Summer School begins
June 6	Tuesday		Last day to register for a full load
June 8	Thursday		Last day to enter a course for credit with a reduced load
June 19	Monday		Last day on which a course may be dropped without a grade
July 28	Friday	5:00 p. m.	Summer School ends

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MAJOR DAVID M. EASTERDAY, B. S. — **Assistant Professor of Military Science and Tactics**

B. S., Ohio State University; graduate of The Field Artillery School.

MAJOR WILLARD L. JONES, A. B., B. L. S. — **Assistant Professor of Military Science and Tactics**

A. B., Presbyterian College; B. L. S., Columbia University; graduate work, University of South Carolina and University of North Carolina; graduate of the Antiaircraft Artillery School and The Command and General Staff School.

MASTER SERGEANT WILLARD E. CLARK — **Operations Sergeant and Assistant Instructor**

** On leave.

MASTER SERGEANT ALBERT F. MELVILLE	Motor Sergeant and Assistant Instructor
MASTER SERGEANT WILLIAM B. HAMMOND	Chief Clerk
SERGEANT FIRST CLASS SHELDON COFFMAN	Supply Sergeant and Communications N. C. O.
SERGEANT LOUIS W. GREENE	Artillery Mechanic and Assistant Instructor

ADMINISTRATIVE STAFF

W. A. AULT, Superintendent of Buildings and Grounds

FRED BALLOU, Book Store Manager

LOUISE BROADDUS, A. B., Recorder, Registrar's Office

MRS. KATHERINE CHENAULT, A. B., Hostess, Student Union Building

MRS. J. D. CHENAULT, Housekeeper, Burnam Hall

MRS. VIRGINIA CLARK, Assistant to Alumni Secretary

LOIS COLLEY, Secretary to the President and Secretary to Board of Regents

BEATRICE GOINS, B. S., Assistant to the Director of Public Relations

MRS. BESSIE H. GRIGGS, Information Clerk

JO ANN HAGAN, Stenographer, Business Office

MRS. JOHN HAGAN, Social Director, Burnam Hall

MRS. J. W. HILL, Assistant Director of the Cafeteria

MRS. MAUDE HILL, A. B., Cashier

MRS. C. A. KEITH, Housemother, Men's Dormitories

E. P. McCONNELL, Bookkeeper

EDITH L. McILVAINE, Supervisor of the Cafeteria

MARY F. McKINNEY, B. S., M. A., Alumni Secretary

MARY MITCHELL, Assistant to the Business Agent

MRS. DUDLEY MURPHY, Accounts Clerk

CHARLOTTE NEWELL, Secretary to the Dean of Women

MRS. HELEN W. PERRY, Assistant to the Director of Personnel

CARRIE POTTS, Secretary to the Registrar

MARTHA J. SARGENT, R. N., College Nurse

MARTHA H. SHARP, B. S., Secretary to the Director of Public Relations

MAYE M. WALTZ, Secretary to the Dean

EUNICE WINGO, Assistant to the Dean of Women

FACULTY ORGANIZATION

CHAIRMEN OF DIVISIONS OF INSTRUCTION

Applied Arts and Sciences ..... W. J. Moore
Agriculture — Chairman
Commerce
Home Economics
Industrial Arts
Library Science

Fine Arts ..... Frederic P. Giles
Art — Chairman
Music

Biological and Physical Sciences ..... Thomas C. Herndon
Biology — Chairman
Chemistry
General Science
Geology
Physics

Education ..... D. Thomas Ferrell
Elementary Education — Chairman
Educational Psychology
Public School Administration
Secondary Education
Training Schools

Health and Physical Education ..... Charles T. Hughes
Health — Chairman
Physical Education

Languages ..... Roy B. Clark
English — Chairman
French
German
Latin
Spanish

Mathematics ..... Smith Park
Chairman

Military Science ..... Colonel William D. Paschall

Social Sciences ..... C. A. Keith
Geography — Chairman
Government
History
Sociology

COMMITTEES

ADVISORY COUNCIL ON STUDENT PERSONNEL

Moore, Ballou, Brock, Case, Chenault, Cuff, Edwards, Floyd, Hounchell, Keith, Mattox

ADVISORY COUNCIL ON PUBLICATIONS

Cuff, Adams, Barnhill, Clark, Dorris, Floyd, Gill

ALUMNI

McKinney, Adams, Barnes, Blackburn, Broaddus, Burkich, Carty, Case, Chenault, Coates, Darling, Davis, Doty, Floyd, Goins, Harris, Hill, Lewis, Moore, Regenstein, Richards, Rigby, Rutledge, Sharp, Stocker, Story, Teater, Tyng, Wickersham, Leland Wilson

ATHLETICS

Parks, Coates, Darling, Grise, Hughes, LaFuze, Samuels

CREDITS AND CREDENTIALS

Mattox, Clark, Cuff, Herndon, Park

ENTRANCE EXAMINATIONS

Mattox, Barnhill, Burns, Gill, McKinney, Walker

FINE ARTS AND ENTERTAINMENT

Giles, Buchanan, Campbell, Kennamer, McPherson, Murbach, Seevers, Stone, Telford, Tyng, Van Peursem, and four students

GRADUATE INSTRUCTION

Moore, Black, Clark, Coates, Ferrell, Giles, Keith, Kennamer, Park, Schnieb

GRADUATION

Kennamer, Black, Case, Keith, Mattox

LIBRARY

Floyd, Dorris, Ferrell, Giles, Herndon, Hood, Keene, LaFuze, Lee, McKinney, Moore, Park, Van Peursem, two juniors, and two seniors

PERMANENT PLANNING AND CURRICULUM

Moore, Case, Clark, Coates, Cuff, Edwards, Ferrell, Giles, Herndon, Hughes, Keith, Mattox, Park, Paschall, and four students

PUBLIC RELATIONS

Carty, Burns, Coates, Cox, Engle, Ford, Keene, Kennamer, Lee, Mattox, Seevers, Whalin, and four students

RURAL EDUCATION

Ferrell, Case, Edwards, Engle, Hansen, Regenstein, Story, Tyng, Elizabeth Wilson, Wingo, and four students

RULES

Park, Carter, Case, Edwards, Fowler, Keith, Mattox

SOCIAL

Case, Burrier, Burns, Cox, Cuff, Fowler, Herndon, Keith, Lee, Tyng, and eight students

STUDENT GUIDANCE AND PERSONNEL

Cuff, Adams, Burrier, Deniston, Engle, Ford, Giles, Gill, Grise, Herndon, Kennamer, LaFuze, Lewis, McPherson, Samuels

STUDENT LOANS, SCHOLARSHIPS, AND FELLOWSHIPS

Cuff, Brock, Case, Cox, Keith, Schnieb

STUDENT UNION

Chenault, Ballou, Case, McIlvaine, O'Donnell, Stone, and five students

STUDENT WELFARE

Keith, Case, Coates, Ford, Park, Whalin, Whitehead

VETERANS

Mattox, Cox, Ferrell, Grise, Keene

VISUAL EDUCATION

LaFuze, Floyd, Gatwood, Gumbert, Mattox, Pugh, Samuels, Stocker, Tyng

The President and Dean are ex officio members of all standing committees.

A CAMPUS DRIVE

WALNUT HALL

GRILL AND BOOKSTORE

GENERAL INFORMATION

GENERAL INFORMATION

ORGANIZATION

The Eastern Kentucky State College is organized on the semester plan. The school year is divided into two semesters of eighteen weeks each and into a summer session. A student who attends both semesters and the summer session can complete a full four-year college course in three calendar years.

The College curricula are organized on various levels and lead to the Bachelor of Arts or the Bachelor of Science degree, and to the Master of Arts degree. Freshman and sophomore courses are offered in the Lower Division. Junior and senior courses are given in the Upper Division. Observation and Student Teaching are provided in the Elementary and Secondary Training Schools. The Graduate Division offers work for those who want to major in Education and minor in other departments.

LOCATION

Eastern Kentucky State College is conveniently located in Richmond, Madison County, Kentucky. Richmond is on the main line of the L. & N. Railway, 112 miles south of Cincinnati, Ohio. The College can be reached easily by automobile. It is on the Dixie Highway (U. S. No. 25), 26 miles southeast of Lexington; on U. S. Highway No. 227; and on Kentucky Highway No. 52.

Richmond is a city of about 7500 people. It is located in the famous Bluegrass Region of Kentucky and presents many advantages as a college community.

Eastern is surrounded by places of historic and scenic interest. These places of interest include: Boonesboro (12 miles), Clay's Ferry Bridge—one of the Nation's finest (13 miles), Harrodsburg and Shakertown (45 miles), Herrington Lake (35 miles), Cumberland Falls (100 miles), State Capitol at Frankfort (55 miles), Berea College (14 miles), Kentucky Natural Bridge State Park (63 miles), My Old Kentucky Home (85 miles), Louisville (100 miles), Lincoln Memorial (110 miles), the foothills of the Cumberland Mountain (20 miles), and the famous stock farms in the heart of the Bluegrass Region (26 miles).

HISTORY

The year the State of Massachusetts established normal schools for the preparation of teachers, Kentucky established a public school system. The first Superintendent of Public Instruction of Kentucky in his initial report requested the General Assembly to pass legislation for "the founding of one or more normal schools for the purpose of training the sons of the soil for teaching." Fif-

teen different state superintendents appeared before more than thiry sessions of the Legislature making the same plea for a school for teachers. Sixty-eight years passed before the General Assembly of 1906 heeded this request. The late J. C. W. Beckham, Governor of the State at that time, signed the bill establishing the Eastern Kentucky State Normal School on March 21, 1906, and shortly after a commission selected the campus of old Central University at Richmond as the site of the new school.

The curriculum has been improved from the short review and certificate courses of the first years. Eastern now offers four-year curricula leading to the Bachelor of Arts or the Bachelor of Science degree in teacher education and in general or professional areas. A one-year graduate curriculum leads to the Master of Arts degree in Education. Requirements for college entrance have been raised from eighth grade graduation or possession of any kind of certificate to graduation from an accredited high school.

The College has been directed by five presidents: Ruric Nevel Roark, 1906–1909; John Grant Crabbe, 1910–1916; Thomas Jackson Coates, 1916–1928; Herman Lee Donovan, 1928–1941; William Francis O'Donnell, 1941—.

PURPOSE

Eastern has for its general purpose the development of vigorous health, thorough scholarship, strong professional spirit, broad culture, and balanced personality in its students. Courses of study and extra-curricular activities are devoted to the concept that character and services are the highest aims of education.

The specific aims of the College are:

A. The primary aim of the Eastern Kentucky State College is to prepare teachers for the schools of Kentucky. The College was established to prepare teachers and it has held to that purpose with such expansions and modifications as are needed to maintain progressive educational policies and practices.

B. Another aim is to provide instruction in general and specialized fields so that students may be prepared for professional, technical, and industrial careers. The College has many students who are pursuing successfully courses of a pre-professional or vocational nature. Such students secure excellent liberal arts work in various departments leading to a baccalaureate degree in the sciences or in the arts.

C. A third aim of Eastern is to make a real contribution to the life of the community and the area which it serves. The institution attempts to meet this obligation by:

1. Preparing only worthy teachers.
2. Conducting extension courses (either on the campus or off), and study centers when requested.
3. Furnishing expert advice or other assistance at teachers' conferences.
4. Supplying speakers for high school commencements and other community activities.
5. Keeping a personal interest in the graduates and encouraging professional and intellectual growth.
6. Keeping in close touch with the needs of the teachers in the field and by being ready to give assistance to the teachers.
7. Holding on the College campus conferences for the further development of leaders.
8. Supplying to the teachers of the community which the College serves library materials and other materials such as visual aids.

BUILDINGS AND FACILITIES

THE CAMPUS

The beauty of Eastern's campus lies in the gently rolling bluegrass slopes and in the stately forest trees and shrubs. The campus is further enhanced by a replica of an ancient Greek Amphitheater which has a seating capacity of 2,500.

The College plant, valued at approximately $3,250,000.00, includes eighteen beautiful and well-equipped buildings located on more than 225 acres of bluegrass land.

COATES ADMINISTRATION BUILDING

The Thomas Jackson Coates Administration Building was named in honor of Eastern's third president. The offices of the President, Dean, Registrar, Personnel Director, Business Agent, Director of Public Relations, and of some instructors are located in this building. There are also classrooms in the Administration Building.

HIRAM BROCK AUDITORIUM

The Hiram Brock Auditorium was named in honor of Senator Hiram Brock who served as a member of the Board of Regents. It adjoins the Administration Building and has a seating capacity of 2,000. The Auditorium has a stage 40 feet by 30 feet, equipped with adequate curtains and drops, a modern movie projection room, and a Hammond electric organ. It also contains studios and dressing rooms.

PRESIDENT'S HOME

The two-story brick residence, which is the President's Home, was constructed in 1889 as a residence for the Chancellor of Central University but did not become the property of the College until 1912.

ROARK BUILDING

Roark Building has recently been completely repaired and redecorated. It provides excellent facilities for the departments of mathematics, chemistry, biology, physics, geography, and geology. It was named in honor of Dr. Ruric Nevel Roark, Eastern's first president.

CAMMACK BUILDING

The James W. Cammack Building was named for a man who was appointed to the first Board of Regents for the College in 1906 and who remained on the Board as an efficient and faithful member until his death in 1939. The building is designed and used entirely for the elementary grades of the College Training School.

RURAL DEMONSTRATION SCHOOL

The Rural Demonstration School, located on the College Farm near the campus, is a model brick building. It serves as a laboratory in which students who plan to teach in the one-room rural schools of the State may get practical experience.

UNIVERSITY BUILDING

The University Building, a handsome, four-story brick structure, was constructed in 1874 and, as a result of excellent maintenance, still serves as well as when it was built more than seventy years ago. It stands as a landmark on the campus and houses the high school division of the Eastern Kentucky State College Training School.

CRABBE LIBRARY

The John Grant Crabbe Library houses over 80,000 volumes and several hundred periodicals. The John Wilson Townsend Collection of Kentuckiana, located in the Eastern Library, consists of more than 4,000 volumes. It is one of the most extensive of its kind in existence. The Library was named in honor of Eastern's second president, John Grant Crabbe, who served the institution from 1909 to 1916.

WEAVER HEALTH BUILDING

The Weaver Health Building is named for the late Charles F. Weaver of Ashland, Kentucky, who served on the Board of Regents at Eastern from 1920 to 1932. It is one of the largest and best equipped buildings on the campus. In it there are two gymnasiums, one 110 feet by 90 feet and one 74 feet by 40 feet; a large variety of physical education apparatus; an official-size tile swimming pool equipped with machinery for heating, filtering, and purifying all water that enters the pool; more than 1,200 steel lockers for the use of the students; offices of members of the health and physical education staff; several classrooms; ROTC headquarters; and the bacteriology laboratory.

FITZPATRICK ARTS BUILDING

The Fitzpatrick Arts Building houses three departments of the College; Industrial Arts, Home Economics, and Art. Modern

machinery and the latest teaching equipment are available to students taking work in these departments. It is named for the Honorable H. D. Fitzpatrick, who was a member of the Board of Regents of the College.

HOME ECONOMICS PRACTICE HOUSE

The Practice House is the residence for those students in the Home Economics Department who take the laboratory course in Household Management. Here the girls live and work together for about twelve weeks, co-operatively preparing their own meals, doing their own marketing, entertaining their guests, and making a pleasant home life for themselves.

TELFORD MUSIC BUILDING

The Telford Music Building, located on the campus, was formerly the manse of the First Presbyterian Church. In it are the studios of the teachers of music, except the director, and several practice rooms. It is named for Dr. R. L. Telford, who was minister of the First Presbyterian Church for many years.

JOHNSON STUDENT UNION BUILDING

Eastern's newest and finest building is the Keen Johnson Student Union Building. This building contains club rooms for students, recreation halls, the Little Theater, student post office, bookstore, soda fountain and grill, dining halls, the faculty club rooms, and a spacious reception room. It was named in honor of a former Governor of Kentucky who also served on the Board of Regents. The Student Union Building was constructed by means of a Federal grant and a bond issue at no direct cost to the State.

HANGER STADIUM

The Hanger Stadium was built as a gift from students, faculty, and friends of the College, supplemented by a PWA grant. This concrete, steel, and tile structure has dormitory accommodations for thirty men students, offices for coaches, dressing and equipment rooms, and showers. The seating capacity is 5,000.

STATELAND FARM

New Stateland Farm, owned and operated by the College, consists of approximately 185 acres and the total College-owned acreage is approximately 225 acres. The Farm is used as a laboratory by the Department of Agriculture. Vegetables, fruits and

dairy products from the Farm are used in the College Cafeteria. The Farm is the home of one of the finest purebred Holstein dairy herds in the country. New Stateland Hall is located on the Farm and is used as a residence by the manager and as a men's dormitory.

POWER PLANT

The Power Plant serves as a central heating unit for all the buildings on the campus.

BECKHAM HALL, McCREARY HALL, MILLER HALL, AND MEMORIAL HALL

The dormitories for men consist of four separate units: Beckham Hall, McCreary Hall, Miller Hall, and Memorial Hall. The first three units provide excellent dormitory accommodations for 48 men each. Memorial Hall provides accommodations for 60 men. The total capacity of the four units is 204 men. The rooms in Beckham, McCreary, and Miller Halls are arranged in suites of four with one adjoining bath. For each pair of such sections, one above the other, there is a private outside entrance. There are no halls except those necessary to connect each group of four rooms with the outside entrance and the bath. Prospective students are invited to inspect the dormitories by appointment with the Dean of Men.

Beckham Hall is named for the late J. C. W. Beckham, who was Governor of Kentucky when Eastern was founded. McCreary Hall is named for James B. McCreary, a Richmond citizen, who twice served the State as Chief Executive. Miller Hall is named for Robert W. Miller, a Madison countian, who introduced in the lower house of the General Assembly a bill establishing Eastern. Memorial Hall derived its name from a building constructed by Central University.

BURNAM HALL

Burnam Hall was named for Judge A. R. Burnam, who served in the Senate and helped Eastern secure her first significant appropriation. It provides beautiful, comfortable, and fireproof living quarters for 370 students. Most of the rooms are arranged in suites of two with a connecting bath. A few rooms have private baths. Prospective students are invited to inspect rooms in the dormitories for women by appointment with the Dean of Women. These buildings are open practically every day in the year.

SULLIVAN HALL

Sullivan Hall is a dormitory for women and accommodates approximately 158 students. It was named for the first local

regent, Mr. Jere A. Sullivan, who helped establish the first two normal schools in Kentucky. Sullivan Hall is a comfortable and convenient home for the women who choose to live there. Central baths are located on each floor of the building.

INDIVIDUAL RESIDENCES

There are a few individual residence buildings which are a part of the campus. One is a two-story brick building that was a part of the Central University plant. It is the residence of the Superintendent of Buildings and Grounds.

VETERANS' HOMES

The College is making special efforts to meet the needs of Veterans for homes. A hundred pre-fabricated houses or apartments have been located on the campus at Eastern for occupancy by Veterans and their families. Dormitory facilities have been secured for one hundred additional single Veterans. Further information regarding Veterans' homes on the College Campus or in Richmond may be secured by writing the College.

BURNAM HALL
A Dormitory for Women

STUDENT SERVICES AND ACTIVITIES

Living Accommodations.—Students who do not live in dormitories are required to live in homes approved by the College. All students not living in their own homes, whether rooming in the dormitories, in private homes, or in rooming houses, are subject to the regulations and supervision of the College.

Dormitory Rooms for Women Students.—Women students are required to occupy dormitory rooms while rooms are available on the campus. After the dormitory accommodations for 528 students are filled, women students may take rooms in private homes in Richmond, but should not engage rooms without first consulting the Dean of Women.

Dormitory Rooms for Men Students.—Dormitory rooms will be reserved for men who meet admission requirements as long as facilities are available. The dormitories for men accommodate 234 students.

Rate of Room Rent for Women Students.—The rate of room rent varies according to the location, furnishings, equipment, and the number of students occupying a room.

BURNAM HALL—

Front rooms	$45.00 per semester per student
All rooms—South Section	36.00 per semester per student
All rooms—North Section	31.50 per semester per student

SULLIVAN HALL—

All rooms ..... $31.50 per semester per student

Rate of Room Rent for Men Students.—Room rent varies according to the facilities provided.

MEMORIAL HALL—

All rooms in this hall rent for $31.50 per semester per student.

BECKHAM HALL, McCREARY HALL, AND MILLER HALL—

All rooms in these halls rent for $41.50 per semester per student.

Linen Service Included in Room Rent.—The rate of room rent listed above for all dormitories includes the linen service for which a separate charge was made formerly. This service includes the providing by the College of sheets and pillow cases for all rooms and the expense of having them laundered.

Each student is expected to provide his own blankets, comforters, towels, soap, etc.

Dormitory Room Reservations.—Students desiring to have rooms reserved in the dormitories should write for application forms. When applying for dormitory reservations, students should mention the price of room preferred. Applications for room reservations are filled in the order in which they are received. Rooms can generally be assigned promptly upon receipt of applications; however, reservations are subject to cancellation unless a student has complied with Admission and Scholarship requirements.

Room reservations cannot be transferred and are void unless claimed by 4:30 p. m. on the opening day of the semester.

Room Deposit.—When an application is made for a room, the student must pay a deposit fee of $5.00. This fee is retained by the College as a guarantee of the proper care of room and furnishings. At the termination of the student's stay in the dormitory, the whole or such part of it as may be due after deduction for damage is made, will be refunded to the student.

Requests for cancellation of room reservation must be received not later than twenty days before the opening of the semester or term for which reservation was made; otherwise, room deposit is forfeited to the College and will not be refunded.

Off-Campus Rooms for Students.—Students interested in renting off-campus rooms may secure a list by writing to the College.

College Cafeteria.—The Cafeteria is operated by the College for the convenience of the students. Most of the students, including those who live off the campus as well as those who live on the campus, find it to their advantage to take their meals in the cafeteria.

Book Store.—The College Book Store is located on the ground floor of the Student Union Building. It is operated by the College and provides books and classroom supplies to students at reasonable prices. A grill is operated in connection with the Book Store.

College Post Office.—The College Post Office provides mail service for all students who live in the dormitories. An individual lock box is assigned to each person. The Post Office is located on the ground floor of the Student Union Building. Students receiving their mail through the College Post Office should have all mail addressed in the following manner: Mr. John Smith, Box 231, College Post Office, Eastern Kentucky State College, Richmond, Kentucky.

Students with off-campus rooms do not receive their mail through the College Post Office. Their mail should be sent to the address where they are living.

Student Health Service.—The student health service at Eastern is under the direction of the College Physician and a nurse.

SULLIVAN HALL
A Dormitory for Women

The service includes an annual physical examination for each student, medical advice and attention at all times, immunizations against contagious diseases, and limited hospitalization. Classes are conducted in first aid, safety, and personal and community hygiene. The health program at Eastern emphasizes preventive treatment. No charge is made for any of these services to the student.

Athletics.—Eastern has intercollegiate athletic teams in football, basketball, baseball, track, tennis, and swimming. These teams participate in a schedule of contests with other college teams each year. Eastern is a member of the Kentucky Intercollegiate Athletic Conference and the Southern Intercollegiate Athletic Association. All official intercollegiate athletic events in which the College participates are governed by the rules and regulations of these two organizations.

Play and Recreation.—Eastern affords its students opportunities for play and recreation. Recreational activities are required of all freshmen and sophomores. These activities, offered during school hours, are varied and seasonal. The aims are to develop regular habits of play, physical strength, vigor and sportsmanship. Sports, such as playground baseball, volley ball, soccer, speedball, hockey, lacrosse, track, field archery, handball, lower organized games and their modifications, are offered.

Every student has an opportunity to participate in the leisure-time activities which are offered in seasonal tournaments.

The Swimming Pool.—The swimming pool in the Weaver Health Building serves both the college and the training schools. Only bona fide students and those officially connected with the institution are permitted to use the pool. A complete physical examination and a health certificate are required for admission. Students who expect to use the pool should see the college physician and arrange to take a physical examination. Regulation cotton bathing suits are required. Admission to the pool is strictly according to schedule.

Student Guidance and Personnel Services.—The personnel program at Eastern is planned to help students meet their individualized needs and to achieve success. Also to help students avoid experiences which are likely to be too costly, the best available tools, techniques, and resources are used.

The personnel services of the College are related to: (1) Admission of new students; (2) orientation of freshmen; (3) evaluation and counseling of students; (4) mental and physical health; (5) provision for well-rounded student activities; (6) supervision of adequate living facilities; (7) maintenance of useful personnel records; (8) provision for employment, placement, and follow-up requirements.

BECKHAM HALL
One of the Dormitories for Men

Many staff members handle various aspects of the personnel work. The Dean of the College, the Registrar, the Dean of Women, the Dean of Men, the Director of Personnel, and in fact, all members of the faculty counsel students. The College Physician handles health problems; the Dean of Women and the Dean of Men provide counsel relative to social life, living facilities, and related problems of students; and other consultants render specialized guidance as needed by students and as implied by a modern philosophy of education.

Personnel services are provided at Eastern for all new students; additional, optional services are available to help individuals with their planning; and clinical services are arranged to meet special needs. All personnel activities are designed to be practical. They are provided to help students attain a maximum personal, social, and academic development in a stimulating environment.

Opportunity for Student Employment.—A limited number of students may earn a part of their expenses by working for the College Cafeteria, Library, Book Store, Post Office, Dormitories, Administrative Offices, College Farm, etc. Some students may also secure part-time employment in Richmond stores, restaurants, and other business establishments.

Students are advised not to enter expecting employment of this kind unless they have arranged for it in advance. All applications for student employment should be addressed to: The Dean, Eastern Kentucky State College, Richmond, Kentucky. As a general rule students should enter Eastern prepared to pay all their expenses for at least one semester.

Vocational Rehabilitation.—Students with physical handicaps of various kinds may be approved for Vocational Rehabilitation and receive all registration and tuition fees and school supplies for nine months of a year. Persons who wish to consult with a representative relative to Vocational Rehabilitation should write to the Department of Education, Division of Special Education, Frankfort, Kentucky, for specific instructions.

Loans.—The student loan fund of the Eastern Kentucky State College is designed to help worthy students complete their education. It has been augmented from time to time by gifts from different individuals and organizations and is being increased annually. Small loans are available to upper-class students. Those having high scholarship records will be given preference in the granting of loans. This fund makes it possible for a student to borrow a small amount of money on a personal note at legal rate of interest. Students who desire further information concerning this fund should get in touch with the Chairman of the Student Aid Committee.

The Charles F. Weaver Fund.—This is a fund of $1,000.00 established by the late Charles F. Weaver, long-time member of the Board of Regents, to encourage proficiency in oratory and home economics. The income from the fund is used to provide prizes to be awarded annually to the student who excels in oratory and to the student who has made the greatest advance in the field of home economics. The recipients are selected by a faculty committee.

William Davis Scholarships.—Under the provisions of the will of the late William Davis of Newport, Kentucky, a sum of money was left for the benefit of students living in the Lona Estella Davis school district of Rowan County, to be used as scholarships at the Eastern Kentucky State College. These scholarships of $200.00 each are awarded by the superintendent of Rowan County schools and the president of the Eastern Kentucky State College. A student desiring to secure one of these scholarships should write to the Chairman of Student Aid Society, Eastern Kentucky State College, or make application to the Superintendent of Rowan County Schools.

Music Scholarships.—The College awards annually three scholarships of $54.00 each to those students who make the most satisfactory progress in piano, voice, and violin.

Science Club Medal.—The Science Club presents annually a medal to that senior majoring in any of the sciences who has achieved the highest standing in science during his college course.

Regents Medal for Oratory.—The Regents of the College present annually a medal for the best oration given by a college student under the direction of the proper authorities.

Kappa Delta Pi Scholarship Award.—Delta Alpha Chapter of Kappa Delta Pi presents annually a medal to the sophomore with the highest scholastic standing.

Student Service Award.—An award presented annually by members of the Young Women's and Young Men's Christian Associations to that member of the graduating class who, during his or her four years at Eastern, has given the greatest measure of service to fellow students.

Fine Arts Series.—It is the purpose of Eastern to surround her students with every cultural advantage. To this end much time and effort are expended to provide programs by the foremost artists. Each student is able to attend these concerts at a very small expense.

Assembly Programs.—Regular and special College assemblies are held for students, faculty members, and visitors. A definite time is set aside in schedules for the regular assembly. Important

College matters are officially presented at assemblies and school spirit is cultivated. Assembly programs are designed as a part of the liberal education offered by the College. The programs consist of inspirational addresses, lectures of general interest, concerts, dramatic performances, class programs, and other numbers. The programs are given by guests, faculty members, and students.

Regular attendance at assemblies is required.—The Board of Regents has passed a resolution stating: "It is the opinion of the Board that assembly programs are a vital part of the instruction offered by a teachers college." They further say: "Because of its fundamental value, we expect both students and faculty members to attend these programs."

Church Affiliation.—Eastern is a state-supported institution and is, therefore, non-denominational. Several fine churches are located in Richmond and students are encouraged to attend the services.

Student Organizations.—The student organizations, societies, and clubs at Eastern are varied enough in their activities to include the interests of all the students. While the membership in them is voluntary, all students find it to their advantage to identify themselves with at least one of these activities. Students receive in these extra-curricular activities a type of training which is impossible for them to get in the classroom. The opportunity for social life among the students, along with the professional and intellectual interests, is a valuable feature of the student activities. Student organizations at Eastern include:

Departmental Clubs.—Agriculture, Alpha Rho Tau (Art), Canterbury Club (English Majors), Cercle Francais, Elementary Council (Elementary Education), Future Teachers of America, Home Economics Club, Iota Alpha Gamma (Industrial Arts Club), Mathematics, Physical Education, Science, Sigma Tau Pi (Commerce Majors), Social Science, World Affairs.

Literary and Dramatic Clubs.—Alpha Zeta Kappa (Public Speaking and Debating), Little Theater Club, Great Books Foundation.

Musical Organizations.—Choir, College Band, College Dance Orchestra, Madrigal Club (Upper-class Girls' Glee Club), Men's Glee Club, Messiah Chorus, Orchestra.

Professional Clubs.—Caduceus Club (Medicine, Dentistry), Phalanx Club (ROTC).

Regional Clubs.—Regional clubs are organized by students from various cities, counties, and sections of the State.

Religious Organizations.—Baptist Student Union, Catholic Club, Christian Youth Fellowship, Methodist Youth Fellowship, West-

minister Fellowship, Young Women's Auxiliary, Young Men's Christian Association, Young Women's Christian Association.

Miscellaneous Organizations.—"E" Club (Letter Students in Athletics), Kyma Club (Pep Club), Photo Club, College Red Cross Unit.

Honorary Fraternities and Sororities.—Alpha Psi Omega (National Honorary Dramatic Fraternity), Kappa Delta Pi (Honorary Educational Society), Pi Omega Pi (National Commercial Teachers), Cwens (National Honorary Society for Sophomore Women).

Publications.—Eastern sponsors two types of publications; one is edited by the faculty and the other is edited by students.

The Eastern Kentucky Review is the official publication of the College.

The Eastern Progress is published semi-monthly by students and is the newspaper of the College.

The Milestone is the College Annual published each year by the representatives of the Senior Class. This publication contains photographic and statistical records of all organizations and events of the College year.

Commencement.—Commencements are held at the close of the spring semester and at the end of the summer session. Students who are candidates for degrees are required to participate in the commencement exercises unless excused by the President. A student who completes the requirements for a degree during the fall semester will receive the degree at the following spring commencement.

Alumni Association.—The purpose of the Alumni Association is to promote fellowship among the ever-increasing number of graduates and to stimulate a mutual interest between the Institution and her former students. All graduates and former students are considered members of the Alumni Association. Those who pay dues of $1.00 per year are active members. Dues should be mailed to the Alumni Secretary, Eastern Kentucky State College.

Extension Division.—Eastern provides, through the Extension Division, correspondence courses, extension class instruction, lecturers, and various types of public school service.

The correspondence courses are prepared and conducted by regular members of the faculty and are, in so far as possible, identical with resident courses. For further details see the Extension Division Bulletin or write to the Director of Extension.

Regular members of the faculty conduct extension classes in cities and communities where teachers desire to pursue work in class groups in practically the same way as they would in resi-

dence. The cost of extension class instruction is reasonable. For further details see the Extension Division Bulletin or write to the Director of Extension.

A maximum of 32 semester hours of the required 128 hours for a Bachelor's degree may be earned by correspondence and extension. One-half of the work required for the renewal of a certificate may be earned by correspondence and extension. Those who plan to teach and take work in the Extension Division should distribute the work over the year.

Correspondence credit is recorded as having been earned at the time of completion of the final test. The above restrictions are Statewide and apply to all institutions alike.

Bureau of Appointments.—The Placement Bureau is maintained by the College to assist students and ex-students in obtaining positions and to aid superintendents, principals, and other public school officials to secure the best qualified individuals to fill their vacancies. No charge is made for this service.

STUDENT UNION BUILDING

ADMISSION TO THE COLLEGE

I. **Methods of Admission.**—Candidates for admission to Eastern may be approved in any of the following ways:

1. **By Diploma.** Graduates of acredited high school are admitted by transcript if they show evidence of satisfactory personal characteristics and of ability to do college work. The general pattern of preparation for college should include two high school majors and one minor. Three units are required for a major and two units for a minor. One major must be in English.

2. **By Examination.** High school students who possess fifteen units may secure admission by passing prescribed examinations or by making scores on classification tests equal to those of the average student. Veterans who have eight units of high school work and who have passed the G. E. D. Test will be admitted to the freshman class. Veterans who have less than eight units may be admitted on the G. E. D. Test provided the test scores and the previous preparation indicate that the student is prepared to do college work.

3. **By Special Approval.** Persons over twenty-one years of age who wish to pursue courses as special students, without reference to graduation, may be granted that privilege if they have adequate preparation for the desired courses.

4. **By Advanced Standing.** Students wishing to enter Eastern from other colleges of recognized standing must have complete official transcripts on file in the Registrar's Office showing a statement of honorable dismissal.

II. **Application for Admission.**—Applications for Admission to the Eastern Kentucky State College cannot be unconditionally approved until transcripts of credits are filed in the Office of the Registrar. As soon as possible after an Application for Admission and a Transcript of Credits are received, the candidate will be notified whether or not he is accepted.

It is the responsibility of the applicant to have the following items sent to the Registrar prior to the opening date of a term:

1. An application for admission, properly filled out by the applicant, should be made upon a regulation blank furnished by the Registrar.

2. A transcript of the secondary school credits, issued after graduation, should be mailed directly by the principal to the Registrar.

3. An official transcript of any college credits and a statement of honorable dismissal, regardless of whether or not the student received credit for the work, should be mailed directly to: The Registrar, Eastern Kentucky State College, Richmond, Kentucky.

STUDENT PROGRAMS AND REGULATIONS

Classification of Students.—Students shall be classified as indicated below upon the completion of the respective number of hours, provided that the student has removed all entrance conditions:

Freshman—Entrance requirements
Sophomore—26 semester hours
Junior—58 semester hours
Senior—90 semester hours
Graduate—Baccalaureate degree

How Courses are Numbered.—Courses are numbered according to the following plan:

Courses numbered 100 to 199 are primarily for freshmen.
Courses numbered 200 to 299 are primarily for sophomores.
Courses numbered 300 to 399 are primarily for juniors.
Courses numbered 400 to 499 are primarily for seniors.
Courses numbered 500 to 599 are for graduate students.

Grading System.—Grades are indicated by letters, to each of which is given a certain value in "grade points." The following is the interpretation placed upon the grading system:

Grade	Meaning	Grade Points per Semester Hour
A	Excellent	3
B	Good	2
C	Average	1
D	Poor	0
F	Failure	0
I	Incomplete	
Z	Conditioned	

The grades, A, B, C, D, and F cannot be changed by the instructor. A grade of "D" gives credit toward a certificate or a degree if with such credits the student's standing is 1 or more. A grade of "I" shall be assigned only upon condition the student has been unable to complete the course on time because of unavoidable conditions. A grade of "I" must be made complete within one month after the student re-enters the Institution. All grades of "I" automatically become "F" if not completed at the end of a year. The grade of "Z" shall represent a degree of attainment inferior to that of a "D" and shall not entitle the student to any credit but shall promote him to a sequent course in the same department specified by the instructor or head of the department.

On completion of this sequent course with a grade of "D" or higher, the mark of "Z" shall be changed automatically to a grade of "D".

The standing of a student is defined as the ratio of his total number of "grade points" to his total number of semester hours' credit. A student's point average is obtained by dividing the total number of points earned by the total number of semester hours undertaken. Courses in which the marks of Cr., W, or WP are recorded are not figured in computing the point average. In order for a student to fulfill the requirements for a certificate or a degree he must offer a number of "grade points" at least as great as the number of semester hours.

Student Load.—The normal load for a semester for undergraduate students is sixteen semester hours exclusive of Physical Education 110. The minimum load to be classed as a full-time student is twelve semester hours. Students who have established superior records in the Institution may be permitted to enroll for more than sixteen semester hours provided the approval of the Dean of the College is secured at the time of registration. The maximum load, however, shall not exceed twenty-one hours exclusive of Physical Education 110.

Correspondence work may be taken while in residence only on condition that it is counted as a part of the load. The combined load of correspondence and residence work can not exceed the amount the student may take in residence. This regulation applies regardless of the institution with which the student does correspondence work.

Scholarship.—For a semester the minimum standard of achievement which enables a student to re-enroll without question in the College is eight semester hours' credit and ten grade points. Students who fail to meet the above requirements may be re-admitted on probation.

Withdrawal from Courses.—Necessary changes in courses must be made promptly after registration and should be approved by the Dean or the Director of Personnel. Permission to add a course will not be given after registration ends without special approval of the instructor. Approval to drop courses during the last month of a semester will not be given unless justified by conditions beyond the student's control.

Withdrawal from the College.—Occasionally home conditions or some other factors make it necessary for students to withdraw. In such cases the student must see the President and arrange for the withdrawal. Any student who quits school or withdraws without securing the approval of the President may not register again unless the President sees fit to reinstate him.

Official Schedule Changes.—The College reserves the right to cancel a course when the registration is not sufficient to warrant its continuance, to divide classes if the enrollment is too large for efficient instruction, and to change instructors when necessary. Additional courses will be organized if the demand is sufficient.

General Requirements for the Baccalaureate Degrees.—The degree of Bachelor of Arts or Bachelor of Science is conferred upon those students who have completed an approved four-year curriculum. The minimum amount of credit required for the bachelor's degree is one hundred and twenty-eight semester hours of college credit exclusive of Physical Education 110. Not more than thirty-two semester hours of the work required for a degree may be earned by extension and/or correspondence. A candidate for a degree must have been in residence a minimum of thirty-six weeks (at least eighteen of which must have been in the senior year) and must have earned a minimum of thirty-two semester hours while in residence.

The curriculum which the student expects to follow for the completion of the requirements for the bachelor's degree must be filed in the office of the Dean of the College not later than the end of the junior year. The curriculum must be approved by the Dean of the College and by the major professor.

Candidacy for Graduation.—A student planning to graduate in June should file application for a degree before the end of the first semester. Students who are planning to graduate in August should file application not later than the beginning of the second semester. Applications should be filed in the Registrar's Office. Fees for graduation are to be paid at the Business Office and receipts presented to the Registrar's Office.

EXPENSES

Incidental Fees.—Incidental fees paid each semester entitle the student to limited health service, to use of the Library, to use of the Student Union Building, to attend certain Fine Arts programs, to a subscription to the "Eastern Progress," and to other services as directed by the Board of Regents.

Each semester per student	$35.00
Additional out-of-state fee per semester	20.00
Each semester for students carrying less than 12 hours per semester hour	3.00
Each semester for graduate students per semester hour	3.00

Laboratory.—The fees to be paid for laboratory courses are indicated in connection with descriptions of these courses in another part of this catalog. Laboratory fees cover the cost of materials and laboratory service furnished.

The Milestone.—Students who register at Eastern during the regular academic year are required to pay a fee of $6.50 for the College Annual.

Locker, Lock, Towel, and Uniform.—Students who use lockers in the Weaver Health Building are required to pay a rental of $2.50 per semester for use of locker, combination lock for locker, and towel. This fee includes laundry service for towels, bathing suits and gymnasium uniforms for the entire semester.

Student Activity Fee.—Students will pay an activity fee of $4.00 a semester which will entitle them to admission to all athletic events and to a limited number of programs and entertainments sponsored by the college.

Late Registration.—Students who register after the opening date of a semester are required to pay a late registration fee of $2.00.

Change of Schedule.—A fee of $1.00 will be charged for each voluntary change which a student makes in his schedule after it has been prepared and approved at the time of registration.

Graduation.—The graduation fee for baccalaureate degrees is $7.50. The fee covers the cost of diploma, cap and gown rental, and other expenses incidental to graduation.

The graduation fee for the Master of Arts degree is $15.00. The fee covers the cost of diploma and hood, and the rental of cap and gown.

Special Examinations and Services.—When it is necessary to give a special examination to a student after the scheduled time for

same a fee of 50 cents will be charged. This fee covers such services as physical examinations, classification tests, pictures, etc. A special examination as used here is not interpreted to mean examinations for entrance, course examinations, and examinations for advanced standing.

Transcript of Credits.—Each student will be given one transcript of his work without charge. There will be a fee of $1.00 for each additional transcript after the first one has been furnished.

Rate of Room Rent.—The rate of room rent varies from $31.50 to $45.00 per semester. Specific prices are listed under Living Accommodations.

Estimated Expenses.—The necessary college expenses for one semester average about $235.00. This estimated amount is based on the following itemized statement:

Incidental fee	$ 35.00*
Board, if all meals are taken in the college cafeteria	126.00
Board may be more or less than this amount, depending on the needs of the individual student.	
Room Rent	38.00
Room rent varies from $31.50 to $45.00 per semester for women and from $21.00 to $40.50 per semester for men.	
Books and supplies approximately	20.00
Other expenses	15.00

The above estimate does not include laundry, clothes, and personal spending money.

Students who take private music lessons and/or laboratory courses must add the respective fees to the above estimates in calculating the total expenses for a semester. Music and laboratory fees are listed in connection with course descriptions.

All fees, including the incidental fee, are payable in advance. Board and room rent may be paid in two equal installments, one at the beginning of the semester and the other at the middle of the semester.

* Each semester for out-of-state students, $55.00.

THE LIBRARY

TEACHER-EDUCATION CURRICULA

Degrees.—The Curricula offered by the College have been planned and developed to meet the needs of students who desire to become teachers, supervisors, and administrators in the public schools. Curricula are offered for the preparation of elementary teachers; for teachers of the special subjects of agriculture, art, commerce, health and physical education, industrial arts, music, and vocational home economics; and for the preparation of high school teachers in fields of biology, chemistry, English, French, geography and geology, history, Latin, mathematics, and physics. These curricula lead to the baccalaureate degrees and the Master of Arts degree with right of certification.

The Bachelor of Arts Degree is conferred upon students who major in art, English, French, geography and geology, history, Latin, music, and social science.

The Bachelor of Science Degree is conferred upon students who major in agriculture, biology, chemistry, commerce, elementary education, health and physical education, home economics, industrial arts, mathematics, and physics.

The Master of Arts Degree is conferred upon students who complete the graduate program designed to meet the needs of teachers, supervisors, and educational administrators.

Specific Requirements for Certificates and Degrees.—The Codified regulations relative to teacher education and certification, approved by the Council on Public Higher Education and the State Board of Education and published by the State Department of Education, indicate minimum requirements for various types of certificates.

PROVISIONAL ELEMENTARY CERTIFICATE

The Provisional Elementary Certificate valid for three years shall be issued to a person who meets the general requirements of law and files a transcript of standard college credits showing the completion of the following curriculum:

General and Special Preparation:

Block 1—English	9 sem. hrs.
Oral and Written Composition	6 sem. hrs.
Children Literature	3 sem. hrs.
Block II—Science	6 sem. hrs.
Block III—Social Studies	9 sem. hrs.
(a) A study of Western Civilization	6 sem. hrs.
or	
(b) Introduction to Social Studies	6 sem. hrs.
(c) Separate courses in Social Studies	3 sem. hrs.
Block IV—Fine Arts	6 sem. hrs.
Public School Art	3 sem. hrs.
Public School Music	3 sem. hrs.

Block V—Health ..... 4 sem. hrs.
Basic Health including health education, diet, community health, individual health;
Physical education in the Elementary School including plays and games, corrective activities, recreation.

Block VI—Professional Education ..... 17 sem. hrs.
Child Growth and Development ..... 3 sem. hrs.
Techniques ..... 6 sem. hrs.
Teaching Reading
Teaching Arithmetic
*Fundamentals of Elementary Education ..... 4 sem. hrs.
*Supervised Teaching ..... 4 sem. hrs.

Block VII—General Electives ..... 13 sem. hrs.
Guidance serves as a basis for choice of electives.

STANDARD ELEMENTARY CERTIFICATE

The Standard Elementary Certificate valid for four years shall be issued to a person who completes a baccalaureate degree and meets the requirements for teaching in the elementary schools. This certificate may be re-issued or renewed every four years after three years of teaching experience during the life of the certificate or upon the presentation of one-half year of standard college or university work of graduate grade. The Standard Elementary Certificate may be extended for life upon the presentation of evidence that the holder has had three years of teaching experience in the elementary field during the life of the certificate and has completed the requirements for the Master's degree in a standard college or university. Upon application to the Department of Education, a person shall be issued the Standard Elementary Cetrificate if he files a transcript of credits showing the completion of the following curriculum for elementary teachers:

General and Specific Preparation

Block I—English ..... 18 sem. hrs.
Oral and Written Composition ..... 6 sem. hrs.
Children's Literature ..... 3 sem. hrs.
American Literature and World Literature ..... 6 sem. hrs.
English Elective ..... 3 sem. hrs.

Block II—Science ..... 12 sem. hrs.

Block III—Social Studies, including ..... 21 sem. hrs.
(a) A study of Western Civilization
(b) Introduction to Social Studies
(c) Separate courses in social studies area ..... 12 sem. hrs.
Economics, History and Government, and Geography ..... 9 sem. hrs.

Block IV—Fine Arts ..... 12 sem. hrs.
Public School Art ..... 3 sem. hrs.
Elective in Art ..... 3 sem. hrs.
Public School Music ..... 3 sem. hrs.
Elective in Music ..... 3 sem. hrs.

* Fundamentals of Elementary Education with 8 sem. hrs. of credit may be offered for the Provisional Elementary Certificate in lieu of 4 sem. hrs. in Fundamentals and 4 sem. hrs. in Supervised Teaching in those institutions which have approved laboratory facilities. In such cases the work must include directed observation and participation.

Block V—Health ..... 6 sem. hrs.
Basic health including health education, diet, community health, and individual health; and Physical Education in the Elementary School including plays and games, corrective activities, and recreation ..... 4 sem. hrs.
Nutrition emphasizing the School Lunch Program, resources, and helping children with their diet.. 2 sem. hrs.

Block VI—Professional Education ..... 28 sem. hrs.
Child Growth and Development ..... 6 sem. hrs.
Techniques ..... 6 sem. hrs.
Teaching Reading
Teaching Arithmetic
Fundamentals of Elementary Education ..... 8 sem. hrs.
Supervised Teaching ..... 8 sem. hrs.

Block VII—General Electives ..... 31 sem. hrs.
Guidance serves as a basis for choice of electives

PROVISIONAL HIGH SCHOOL CERTIFICATE

The Provisional High School Certificate valid for four years shall be issued to a person who completes a baccalaureate degree for the training of high school teachers. This certificate may be renewed every four years after three years' teaching experience, or upon presentation of one-half year of standard college or university work of graduate grade, earned since issuance or last renewal of the certificate. If the holder fails to teach the three years required for renewal or reissuance, the certificate may be renewed or reissued upon 4 semester hours of standard college or university work of graduate grade for each year he fails to teach upon the certificate. Upon application to the Department of Education, a person shall be issued the Provisional High School Certificate if he files a transcript of credits showing the completion of a curriculum which includes the following courses and standards:

A. **Minimum General and Code Requirements** 45 sem. hrs.

1. English—Minimum ..... 12 sem. hrs,
Including Oral and Written Composition, Literature, and Speech (a separate course in speech is not required)

2. Health, Physical Education and Safety—minimum.... 6 sem. hrs.

3. Group or Field Requirements—minimum ..... 27 sem. hrs.
Each candidate must present not less than 27 semester hours of credit, distributed among not fewer than 3 or more than 4 fields, with not fewer than 6 semester hours in any field. Two of these groups must be in fields different from the major and minors or area of concentration. One group may be in the same field but not in the same subject as the major or one minor.

The fields from which the 27 hours of credit may be selected are:
Fine Arts
Foreign Language
Mathematics
Philosophy and Psychology (Courses in Psychology submitted in partial fulfillment for professional requirements may not be used to satisfy a group requirement in this subject)
Science
Social Science
Vocational Subjects (Agriculture, Home Economics, Commerce, Industrial Arts, etc.)

B. **Teaching Majors and Minors**

1. A major shall require 24 semester hours, except a major in English shall require 30 semester hours, and a major in Speech and Dramatics shall require 30 semester hours.
2. A minor shall require 18 semester hours.
3. Each curriculum shall require
   (1) an area of concentration, or
   (2) two majors, or
   (3) one major and two minors, or
   (4) one major and one minor when credit in both is 48 semester hours (54 when English is included as a major)

C. **Professional Preparation** 18 sem. hrs.

1. Student Teaching ..... 8 to 9 hrs.
   The professional requirements for teachers shall be 18 semester hours, at least 8 of which shall be in student teaching. Practice teaching should include actual experience in all phases of a teacher's work with a minimum of 144 clock hours devoted to the total experiences and with not less than 90 clock hours in actual observation, participation, and teaching. . . . Practice teaching should be preceded and supplemented by observation and other types of experiences with children, parents, and teachers in a variety of situations.
2. Other Professional Courses ..... 9 to 10 hrs.
   There shall be a minimum of 9 semester hours of Professional courses in addition to student teaching in the following areas:
   a. Child Growth and Development
   b. Fundamentals of Secondary Education
   c. Organization and Administration of the Public School System

D. **Completion of a Baccalaureate Degree**

STANDARD HIGH SCHOOL CERTIFICATE

The Standard High School Certificate valid for five years shall be issued to a person who meets the requirements of law and general regulations of the State Board of Education and files a transcript of credits showing the completion of the four-year curriculum for the training of high school teachers as prescribed by the Council on Public Higher Education, and who, in addition thereto, completes the requirements for a Master's degree in a standard graduate school.

PROVISIONAL CERTIFICATE IN ADMINISTRATION AND SUPERVISION

The Provisional Certificate in Administration and Supervision valid for four years shall be issued to a person who has fulfilled the requirements of law and the general regulations of the State Board of Education, who has had a minimum of two years' successful teaching experience, who has completed a four-year curriculum for the training of elementary or high school teachers as approved by the State Board of Education, and who presents a transcript of

standard college credits showing the completion of the following courses in Education:

Courses in Administration and Supervision	9 sem. hrs.
Courses in Elementary Education	6 sem. hrs.
Courses in Secondary Education	6 sem. hrs.

The requirements in Administration and Supervision for the issuance of the Provisional Certificate Administration and Supervision shall be approximately as follows:

General Administration and Supervision	3 sem. hrs.
Administration and Supervision of Secondary Schools	3 sem. hrs.
Administration and Supervision of Elementary Schools	3 sem. hrs.

The Provisional Certificate in Administration and Supervision may be renewed after four years upon three years' teaching experience during the life of the certificate, or upon presentation of one-half year of standard college or university work of graduate grade earned since issuance or last renewal. If the holder fails to have the three years' experience during the life of the certificate, the certificate may be reissued or renewed upon 6 semester hours of standard college or university work of graduate grade for each year of experience he fails to obtain.

STANDARD CERTIFICATE IN ADMINISTRATION AND SUPERVISION

The Standard Certificate in Administration and Supervision valid for five years shall be issued to a person who has met the requirements for the issuance of the Provisional Certificate in Administration and Supervision and in addition thereto files a transcript of standard college credits showing the completion of the requirements for the Master's degree, with a major in the field of administration and supervision, in a standard graduate school.

The Standard Certificate in Administration and Supervision may be extended for life upon presentation of evidence that the holder has had three years' successful experience in Administration and Supervision during the life of the certificate. If the holder fails to present the required experience for life extension before the certificate expires, the certificate may be reissued or renewed for five years upon two years' experience during the life of the certificate, or upon 4 semester hours of additional college or university work of graduate grade for each of the two years' experience he fails to obtain.

PROVISIONAL CERTIFICATE FOR ATTENDANCE OFFICERS

The Provisional Certificate for Attendance Officers shall be issued to a college graduate who holds a legal teaching certificate

or meets the requirements for such certificate, who has had two years of recent experience as a teacher or experience as an attendance officer, and who has completed the following minimum essential courses.

Pupil Accounting and Pupil Personnel	3 sem. hrs.
Social Case Study and Community Organizations and Their Work	3 sem. hrs.

The Provisional Certificate for Attendance Officers shall be valid for four years and may be renewed on two years' experience or upon 6 semester hours of standard graduate work.

The Training Schools.—The campus laboratory schools enroll about 350 pupils and have fourteen supervising teachers. The organization includes the Elementary Training School of six grades located in Cammack Building, the Model High School of six grades located in University Building, and the one-room Rural Demonstration School of eight grades situated nearby on the College farm.

Pupils who attend the campus training schools come from the city and county in the surrounding community. The number of pupils for each grade is limited to thirty. Listed below are the annual registration fees in the elementary school and the high school:

Grades 1 to 6 inclusive	$20.00
Grades 7 to 12 inclusive	20.00

Educational philosophy and procedures are learned by teachers in training through directed observation and supervised practice. The aim is to exemplify in the laboratory schools progressive trends in educational practice.

College students in professional courses and in professionalized or special methods courses come into the training schools by appointment to observe. A limited number of students preparing to meet the requirements for a Provisional Elementary Certificate spend a half day in the school observing and participating for the semester. The school is used to a limited extent for experimental work in which college students generally participate.

Supervised student teaching is done in the training schools or in affiliated public schools. Students wanting to do student teaching are expected to file applications several weeks before the semester opens. They must have had as much as one semester of resident work at Eastern, and all college credits should be on file in the Registrar's Office. They must also meet certain standards in general scholarship, special academic preparation, use of English, health, personality, and professional attitude.

GENERAL AND PRE-PROFESSIONAL CURRICULA

Special Curricula.—A four-year curriculum in general education is offered. Completion of this curriculum entitles the student to receive the baccalaureate degree without right of teaching certificate.

The Institution also offers the courses needed by students who are preparing to enter medical schools, colleges of law, colleges of engineering, and so on.

A special curriculum in the field of commerce is offered. This curriculum provides adequate training in commerce (accounting, general business, and secretarial work) to meet the needs of students who desire to enter the field of business.

Students who take their general and pre-professional work at Eastern are able to satisfy the entrance requirements of the leading schools of medicine, colleges of law, colleges of engineering, and other professional institutions.

Specific Requirements for Baccalaureate Degrees without Right of Certification.—This curriculum is planned to meet the needs of those wishing to secure a general education without preparing to teach. The work may be planned to meet the requirements for admission to schools of medicine, dentistry, law, and other professions. Recommended curricula may be secured from the Dean's office or from respective heads of departments by those interested in meeting given requirements. The minimum requirements are:

English 101, 102	6 hours
Humanities (English 211, 212, 131, 231, 301, and/or Foreign Language)	8 hours
Library Science 166	1 hour
Physical Education 110 (four semesters)	2 hours
Science (Biological or Physical)	6 hours
Social Science	6 hours
Sociology (Women)	1 hour
Two majors of 24 hours each, or an area of 48 hours	48 hours
Elective	50 hours

CURRICULUM PREPARATORY FOR MEDICINE

Eastern offers a preparatory course for the study of medicine which, with modifications to meet special variations in requirements, complies with the general entrance requirements of medical schools. The curriculum outlined below also includes institutional requirements for graduation with a Bachelor of Science degree.

It is recommended that a student complete the four-year course of study at Eastern before transferring to a medical school. This

gives the student obvious advantages in medical school and in later work. Furthermore, some medical schools require a four-year course for admission.

Students may elect to complete the outlined three years at Eastern and then use the first year of work from a Class A medical school to complete the requirements for the Bachelor of Science degree. Combination courses are subject to approval by Eastern and by the particular medical school.

Students who desire may take only two years for a premedical course. Many medical schools will not accept students with only two years of premedical training and Eastern does not recommend such a limited course.

SCIENCE—MEDICAL OR SCIENCE—DENTAL CURRICULUM

First Year

First Semester	Hours	Second Semester	Hours
Biology 121	5	Biology 122	5
Chemistry 111	5	Chemistry 112	5
English 101	3	English 102	3
Social Science	3	Social Science	3
	16		16

Second Year

Biology 242	5	Biology 347	4
Chemistry 211	4	Chemistry 212	5
Mathematics 107	3	Mathematics 113	3
Physics 131 or 201	5	Physics 132 or 202	5
	17		17

Third Year

Biology 481	4	Chemistry 312	4
Chemistry 310	5	Foreign Language	3
Commerce 230	3	Humanities (Eng. 212)	3
Foreign Language	3	Psychology 211	3
Humanities	3	Sociology 331	3
	18		16

Fourth Year*

Biology Elective	3	Biology 446	4
Chemistry 415	5	Elective	12
Elective	8		
	16		16

Two years of Foreign Language in college are recommended or the equivalent in high school. A student may omit Mathematics 113, Chemistry 211, or Biology 446, or Social Science if necessary to take 12 hours in a Foreign Language.

The courses listed in parentheses are recommended.

* PLAN II:

Transfer credits from the regular first year course in a School of Medicine or a School of Dentistry.

MEDICAL TECHNOLOGY

Students who are interested in becoming medical technicians may secure many of the required college courses at Eastern. The requirements for this type of work vary and the student should elect courses to meet particular requirements.

PRE-ENGINEERING CURRICULUM

A student may take one or two years of fundamental work at Eastern and then transfer to an engineering college without appreciable loss of credits if he chooses his courses wisely. The pre-professional requirements of a particular college of engineering should be chosen from Mathematics, Chemistry, Physics, and other basic subjects. Every Pre-Engineering student will receive help, upon request, from an advisor.

PRE-LAW CURRICULUM

Students may obtain at Eastern the pre-professional training necessary for entrance to any college of law. All standard law schools require two years of college work for admission and many law schools require three years of college before entrance is granted. No special curriculum is prescribed by the Association of American Law Schools. Students should take work in English, Speech, History, Government, Geography, Accounting, Sociology, Economics, and Psychology.

A student who completes three years of approved Pre-Law work at Eastern and transfers credit for the first year of work in an accredited law school will be eligible for a Bachelor of Arts Degree from Eastern if specific requirements have been met.

SOCIAL WORK

Students who plan to do graduate work in social work or who plan to enter a field of social work with public or private agencies should concentrate on a modified major in the Social Sciences. The work should include Economics, Sociology, Psychology, History, and such additional areas as are needed for basic preparation. Opportunities for work are increasing in the child welfare, juvenile institutions, penal institutions, State social agencies, Federal services, the American Red Cross work, and in similar specialties.

OTHER PRE-PROFESSIONAL CURRICULA

The College affords courses for students who plan to do specialized work in nursing, library science, theology, and in other professional fields.

In addition to standard four-year pre-professional curricula, Eastern may approve specially arranged combined curricula. In

these curricula, the student completes three years as outlined at Eastern to meet basic requirements and then transfers a year of successful work from a Grade A professional school in order to secure a B. S. or a B. A. Degree from Eastern Kentucky State College. This plan may shorten by one year the time needed for obtaining both a baccalaureate and a professional degree.

THE GRADUATE DIVISION

PURPOSE

The Graduate Division offers work leading to the degree of Master of Arts in Education. The graduate courses in Education and in minor areas are offered as part of the regular program of the College and are designed to improve classroom instruction and school administration. The graduate program is planned to meet the needs of teachers in elementary and secondary schools and to provide graduate education for school supervisors and administrators.

TYPES OF STUDENTS

Graduate courses are open to: (1) students who enter and become candidates for the degree of Master of Arts in Education; and (2) students who wish to broaden their education without reference to a graduate degree.

ADMISSION REQUIREMENTS

1. Applicants for admission to the Graduate Division must hold a bachelor's degree from an institution of recognized standing.

2. Official credentials should be filed with the Registrar of the College before entrance. These credentials must include, (a) a complete transcript of high school credits; (b) a complete transcript of college or university credits. If the transcript is not on file prior to entrance, admission will be tentative pending receipt and review of credentials.

3. Application for admission to the Graduate Division must be filed by a student with the Dean of the Institution. Admission to the Graduate Division does not necessarily imply admission to candidacy for the degree of Master of Arts in Education. If an application for admission or for candidacy is approved, a copy of the graduate student's plan of work must be kept on file in the Dean's Office. The major professor and/or members of the Advisory Committee should be consulted in formulating the program. However, the graduate student is expected to show independence in planning his program and in study.

REQUIREMENTS FOR THE MASTER'S DEGREE

1. A person may receive the degree of Master of Arts in Education when he has completed other requirements set out in these regulations and in addition thereto has completed a four-

year curriculum for the education of elementary or secondary teachers as prescribed by the Council on Public Higher Education or holds a certificate based upon four years of standard college preparation and valid for teaching in the state in which it was issued.

2. The student shall have an average standing of 2.0 and no credit shall be granted for a grade below "C".

3. Graduate students may take upper division courses but at least 50 per cent of all course work must be in courses open to graduate students only.

4. Requirements for the degree of Master of Arts in Education may be satisfied by one of the following plans:

Plan I—With a Thesis

The residence requirements shall be 36 weeks (no off-campus or extension work, or work in other institutions, except that six semester hours may be completed in another institution upon approval of the Dean.

The minimum course credit shall be twenty-four semester hours.

Plan II—Without a Thesis

The residence requirements shall be 36 weeks.

The minimum credit shall be 30 semester hours, 24 of which must be earned in residence; 6 semester hours may be completed in off-campus work or by extension, or in any other institution or other ways looked upon as desirable.

5. Every candidate for the degree of Master of Arts in Education shall present a minimum of 9 semester hours of graduate credit in professional education and must have had a minimum of 27 semester hours at the undergraduate level and/or graduate level.

The minimum time in which a student who does not have a minimum of 12 semester hours in education, upon being admitted to the graduate school, shall be 45 weeks to complete course requirements for the degree of Master of Arts in Education.

6. The remainder of the course work shall be determined by the institution in terms of the student's need, provided that it shall be upper division and/or graduate courses.

7. The student shall pass a final examination on all fields presented toward fulfillment of requirements for the degree of Master of Arts in Education.

8. Except as provided in item 4, transferred credit shall not be used to reduce either the residence requirements or minimum

number of semester hours required for the degree of Master of Arts in Education.

9. Teachers holding what would ordinarily be considered a full-time position shall not be permitted to receive graduate credit for more than 4 semester hours during any semester.

10. Residence credit for part-time study at the graduate level shall be 1½ weeks for each semester hour of credit and shall apply to students who carry less than a minimum full-time load.

11. One-half of the course requirements and one-half of the residence work shall be done as a full-time graduate student. In evaluating residence credits a summer term of 8 weeks with a minimum load of 6 semester hours of credit shall be regarded as 9 weeks in residence.

12. The average graduate student, unless special approval is secured from the Dean, should take a load ranging from 12 to 16 hours per semester with a maximum of 8 hours per summer term of 8 weeks.

13. Part-time graduate students with full-time positions are advised to take loads ranging from 2 to 4 hours per semester and are expected to meet the high standards prescribed for full-time students.

14. Twelve hours of graduate work earned on a part-time basis shall entitle the student to one semester of residence.

15. Those graduate students who plan to take the degree of Master of Arts in Education will be expected to take a comprehensive qualifying examination before they have proceeded very far with their graduate program. The results of this examination will be used as a basis for guidance.

16. A candidate for the degree of Master of Arts in Education will be expected to take at least 9 semester hours of credit in one or more of the following fields: agriculture, art, biology, chemistry, commerce, English, French, geography, health and physical education, history, home economics, industrial arts, Latin, mathematics, music, physics, science, and social science.

SEMINAR REQUIREMENTS

Seminars or research courses are required of graduate students. Two types of seminar are provided: (1) for graduate students who prepare a Master's thesis and (2) for students who do not prepare a thesis.

THE THESIS

The thesis should show, among other things, the following characteristics: (a) ability of the candidate to work independently

on an approved problem; (b) a reasonable familiarity with the literature of the field of specialization; (c) a practical working knowledge of research methods; and (d) conclusions justified by supporting data.

The thesis must conform to regulations approved by the Graduate Committee for writing theses. It must be approved by the major and minor professors and by the Dean of the College.

Two typewritten copies of the thesis must be filed in the College Library at least one week before the degree is conferred.

EXAMINATION

The graduate student shall, upon official notification, pass an oral and/or written examination on his major, his minor fields, and his thesis.

APPLICATION FOR DEGREE

Application for the degree of Master of Arts in Education must be filed formally with the Dean of the College not later than the tenth week prior to the date on which the degree is to be conferred. The application should have the approval of the major professor and/or the Advisory Committee.

Formal application for the degree of Master of Arts in Education must be filed with the Registrar with the approval of the Dean of the College not later than eight weeks before the degree is to be conferred.

COURSES OF INSTRUCTION

The departments of instruction in the following description of courses are arranged in alphabetical order. Schedules are prepared on the basis of recommended curricula and students who follow the recommended curricula will avoid most conflicts.

CAMPUS SCENE
Amphitheater

AGRICULTURE

(Recommended curriculum for a major in Agriculture with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Agriculture 125	3	Agriculture 126	3
Agriculture 131	3	Agriculture 224	3
Agriculture 211	3	Biology 122	5
Biology 121	5	English 102	3
English 101	3	Mathematics 120	3
Physical Education 110	½	Physical Education 110	½
	17½		17½

Second Year

Agriculture 227	3	Agriculture Electives	5
Agriculture 250	3	Agriculture 223	3
Chemistry 111	5	Agriculture 251	3
Health 303	4	Chemistry 112	5
Physical Education 110	½	Physical Education 110	½
Elective	2		
	17½		16½

Third Year

Agriculture 243	3	Agriculture 252	3
Agriculture 321	3	Agriculture 315	3
Agriculture 345	3	Agriculture 347	3
Agriculture Elective	3	Geology 201	3
Commerce 230	3	Humanities	3
Elective	2	Social Science	3
	17		18

Fourth Year

Agricultural Education at University of Kentucky by special arrangement	18	Agriculture 441	3
		Agriculture 442	3
		Agriculture Elective	2
		Humanities or Social Science	3
		Elective	5
			16

AGRICULTURE

(Recommended curriculum for a major in Agriculture without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Agriculture 125	3	Agriculture 126	3
Agriculture 131	3	Agriculture 224	3
Agriculture 211	3	Biology 122	5
Biology 121	5	English 102	3
English 101	3	Mathematics 120	3
Physical Education 110	½	Physical Education 110	½
Sociology 100 (Women)	1		
	18½		17½

Second Year

Agriculture 227	3	Agriculture 223	3
Agriculture 250	3	Agriculture 251	3
Chemistry 111	5	Agriculture Electives	5
Health 303	4	Chemistry 112	5
Physical Education 110	½	Physical Education 110	½
Elective	2		
	17½		16½

Third Year

Agriculture 243	3	Agriculture 252	3
Agriculture 321	3	Agriculture 315	3
Agriculture 345	3	Agriculture 347	3
Agriculture Elective	3	Geology 201	3
Commerce 230	3	Humanities	3
Elective	2	Social Science	3
	17		18

Fourth Year

English Elective	3	Agriculture 441	3
Social Science Elective	3	Agriculture 442	3
Language	3	Agriculture Elective	2
Elective	7	Social Science	3
		Language	2
		Elective	3
	16		16

Recommended Curriculum for a Second Major in Agriculture

A student with a first major in some other department may take the following courses for a second major in Agriculture: 126, 131, 211, 224, 243, 250, 345, 347.

Recommended Curriculum for a Minor in Agriculture

A student with a major and a minor in other departments may take the following courses for a minor in Agriculture: 126, 211, 224, 250, 345, 347.

AGRICULTURE

LOWER DIVISION COURSES

Agriculture 125. (Formerly Agriculture 25.) Farm Livestock Production. **Three hours.**

Importance and use of livestock products; present types; market classes and grades of beef cattle, sheep, swine, horses and mules; the origin, development, and characteristics of the more important breeds.

Agriculture 126. (Formerly Agriculture 11.) Farm Poultry Production. **Three hours.**

Types and breeds of poultry; poultry houses; balanced rations; poultry diseases; egg production; culling; meat production; parasites; grading and marketing of poultry products.

Agriculture 131. (Formerly Agriculture 12.) General Horticulture. **Three hours.**

The farm garden and small fruits; hot bed and cold frame management; vegetable storage; garden planning; seed selection.

Agriculture 200. Apiculture. **Two hours.**

Lecture and laboratory.

The anatomy of the honey bee; the colony; location and equipment of the apiary; production of comb and extracted honey; diseases and enemies of bees; observation and manipulation of beekeeping equipment.

Agriculture 211. (Formerly Agriculture 20.) Farm Crops. **Three hours.**

Cereal and forage crops; pasture management; weed control; crop rotation; seed testing; inoculation; tillage; tillage tools and implements.

Agriculture 223. (Formerly Agriculture 21.) Farm Dairying. **Three hours.**

Milk as a food; market milk; milk sanitation; dairy inspection; bacteriology of milk; scoring milk and cream; laboratory tests for various dairy products; production costs; pasteurization; refrigeration.

Agriculture 224. (Formerly Agriculture 22.) Dairy Cattle Management. **Three hours.**

Dairy cattle breeds; judging; feeding; calf raising; pedigrees; production testing; dairy barn construction; equipment.

Agriculture 227. (Formerly Agriculture 44.) Beef Production. **Three hours.**

History and importance of the beef cattle industry; selection; breeding; feeding; management of beef cattle.

Agriculture 228. (Formerly Agriculture 26.) Pork Production. **Three hours.**

Types and breeds of swine; selection; breeding; feeding; disease control; home slaughter of pork.

Agriculture 243. (Formerly Sociology 14.) Rural Sociology. **Three hours.**

Historical backgrounds; movements, resources, and problems of rural communities; rural-urban relationships; rural people; problems of rural youth; agriculture and its problems of adjustment; community organizations and institutions; adult education; public health; rural recreation; social welfare; community organization and local government; relationship of the school to other institutions and agencies of the rural community; location and use of educational materials and resources of the community; state and national policies for the improvement of rural society.

Agriculture 250. (Formerly Agriculture 23.) Farm Shop. **Three hours.**
Care and repair of farm tools; tool grinding; soldering; painting; concrete work; shop exercises in the construction of farm equipment.

Agriculture 251. (Formerly Agriculture 24.) Farm Shop: Engineering. **Three hours.**
Farm buildings, construction and repair; farm surveying; drainage; terracing; farm plats; exercises involving the use of the transit and level.

Agriculture 252. (Formerly Agriculture 34.) Farm Shop: Farm Mechanics. **Three hours.**
Selection and care of farm machinery; electric motors; power transmission; care and repair of electric equipment in the home and on the farm.

Agriculture 283. (Formerly Industrial Arts 27.) Arc and Oxyacetelene Welding. **Two hours.**
Manipulative processes and related information basic to successful welding techniques. Fee, $1.50.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Agriculture 304. (Formerly Health 31.) Bacteriology of Dairy and Food Products. **Five hours.**
Prerequisite: Health 303.
Control of microorganisms in dairy and food products; bacterial analysis of dairy and food products; sanitation on the farm.

Agriculture 315. (Formerly Agriculture 30.) Soils. **Three hours.**
Prerequisites: Two semesters of general chemistry.
Soil composition; soil conservation; soil microorganisms; humus; soil water; soil minerals; lime; commercial fertilizers; soil analysis; soil erosion.

Agriculture 321. (Formerly Agriculture 31.) Principles of Animal Nutrition. **Three hours.**
Prerequisites: Two semesters of general chemistry.
Origin and composition of livestock feeds; digestion and assimilation; balanced rations; minerals; feed costs; feeding young animals; feeding growing animals; finished feeding, etc.

Agriculture 325. (Formerly Biology 35.) Genetics. **Three hours.**
The elementary principles of heredity and their relationship to plant and animal breeding; the chromosome theory of heredity; linkage; crossing over; interference; biometrics. Fee, $1.50.

Agriculture 343. (Formerly Biology 37.) Economic Entomology. **Three hours.**
Taxonomy of insects; anatomy and physiology of insects; life histories; economic importance; methods of control; collection of important insects. Fee, $1.50.

Agriculture 345. (Formerly Agriculture 32.) Farm Management. **Three hours.**
Personal characteristics desirable to successful farming; cost of production; living costs; profits; types of farming; soil productivity; livestock problems; farm labor; farm rent; farm equipment; farm layout.

Agriculture 346. (Formerly Agriculture 42.) Agricultural Journalism. **Three hours.**

Livestock advertising; sales letters; news letters; minute recording; feature articles; survey of agricultural journals; editorial writing.

Agriculture 347. (Formerly Agriculture 33.) Farm Accounting. **Three hours.**

The fundamental principles of accounting applied to farm accounts; financial statements; depreciation of inventories; production costs.

Agriculture 350. Livestock Hygiene. **Three hours.**

Prerequisites: Health 303 and Agriculture 304.

The prevention and control of common diseases of farm livestock; sanitation; dispersal of pathogens; external parasites.

Agriculture 352. Farm Motors. **Three hours.**

A study of the fundamental principles governing the selection, construction, operation and care of motors, tractors, and tractor equipment for farm use.

Agriculture 440. Soil Conservation. **Three hours.**

Prerequisite: Agriculture 315.

Conservation of soils and their fertility; erosion and control; soil deterioration and human welfare.

Agriculture 441. (Formerly Agriculture 41.) Agricultural Economics. **Three hours.**

The problems of economics as applied to agriculture; a study of the agricultural industry from historic, geographic, and economic approaches.

Agriculture 442. Marketing. **Three hours.**

Prerequisite: Agriculture 441.

A study of the problems involved in marketing farm produce; country livestock markets; classes and functions of middlemen; grading and standardizing; wholesaling and retailing; transportation and storage; financing; prices; speculation; co-operative markets.

Agriculture. Special Problems. **One hour.**

Available to qualified students, by special arrangement.

A study involving original investigation and research.

ARTS BUILDING

ART

(Recommended curriculum for a major in Art with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Art 117	3	Art 118	3
English 101	3	English 102	3
History 141	3	History 142	3
Physical Education 110	½	Library Science 166	1
Science 109 or 111	3	Physical Education 110	½
Sociology 100 (Women)	1	Science 110 or 112	3
Elective	3	Elective	3
	16½		16½

Second Year

Art 200	2	Art 201 or 202	3
English 211	3	Art 217	2
Industrial Arts 100	3	Art 260	3
Industrial Arts 191	3	English 212	3
Physical Education 110	½	Music 171	3
Physical Education 225	2	Physical Education 110	½
Elective	3	Elective	3
	16½		17½

Third Year

Art 390	3	Art 322	3
Education 211	3	Elective	13
Health 201	3		
Elective	8		
	17		16

Fourth Year

Art 361 or 461	3	Education 364	6
Education 383	3	Education 463	10
Elective	10		
	16		16

Recommended Curriculum for a Second Major in Art

A student with a first major in some other department may take the following courses for a second major in Art: 117, 118, 200, 201 or 202, 217, 260, 390, 322, 361 or 461.

Recommended Curriculum for a Minor in Art

A student with a major and a minor in other departments may take the following courses for a minor in Art: 117, 118, 200, 201 or 202, 322, 390, and 2 hours elective.

ART

LOWER DIVISION COURSES

Art 117. (Formerly Art 10.) Elementary Drawing and Design. **Three hours.**

Introductory contact with the nature and practice of art and with basic knowledges and skills in drawing, design, and color; an essential foundation course for the art major, the elementary education major, and the home economics major. Media used are pencil, tempera, water color, and colored chalks.

Art 118. (Formerly Art 11.) Art Media. **Three hours.**

Prerequisite: Art 117, or a similar course in introductory art.

Designed to meet individual needs and abilities in a variety of problems in landscape, still life and figure drawing; media—charcoal, pen and ink, pastels, water color, tempera, pencil and oils.

Art 200. (Formerly Art 22.) Art Appreciation: Orientation. **Two hours.**

Designed to establish a basis for judgment and good taste in the consideration and use of art in daily living through the study of examples of architecture, sculpture, painting, weaving, the art of the book, and ceramics.

Art 201. (Formerly Art 20.) Drawing, Painting, and Composition. **Three hours.**

Prerequisite: Art 117.

Emphasing technical skill and creative ability in the use of charcoal, pastels, oils, and water colors; study of still life; outdoor sketching; figure composition; artistic anatomy.

Art 202. (Formerly Art 21.) Ceramics and Ceramics Sculpture. **Three hours.**

Prerequisite: Art 117.

Creative experience in three dimensional composition given for the purpose of developing a stronger sense of plastic form; objects molded by hand, and on the potter's wheel.

Art 217. (Formerly Art 23.) Lettering and Poster Design. **Two hours.**

Development of ability to apply art principles in the production of hand lettering; lettering structure; spacing; poster design.

Art 218. Advertising Lettering and Commercial Design. **Two hours.**

Prerequisite: Art 217.

Designed to meet the needs of those who wish to pursue lettering as a commercial phase of art; problems in block printing and silk screen; folders and advertising layout.

Art 219. (Formerly Art 29.) Design. **Two hours.**

Designed to meet the needs of the major in Art, Industrial Arts, and Home Economics. Formal drill in the elements of design to meet the needs of the student who wishes to become more efficient in the creative experience in structural and decorative design.

Art 220. (Formerly Art 24.) Problems in Interior Design. **Two hours.**

Prerequisite: Art 117.

A survey of the principles of design in all interiors; art elements—color, form, and line in furniture and furnishings; problems in house plans and blueprint reading.

Art 221. (Formerly Art 25.) Fashion Illustration. **Two hours.**
Prerequisite: Art 117.
Problems designed to develop the student's ability to represent the costume in different art media and to help him understand technical problems of fashion illustration; commercial layouts; readings in the history of costume.

Art 227. (Formerly Art 27.) Applied Design. **Three hours.**
Prerequisite: Art 219.
Development of craftsmanship in the use of design as applied to weaving, enameling, leather tooling, stenciling, linoleum cuts, and needle work.

Art 228. (Formerly Art 28.) Advanced Applied Design. **Three hours.**
Prerequisite: Art 227.
This course emphasizes design in weaving and advanced leather tooling. Rugs and table mats are woven from waste and commercial materials on the various looms, such as card, tack, and large two- and four-heddle types.

Art 260. (Formerly Art 26.) Public School Art. **Three hours.**
Designed to meet the needs of the classroom teacher in understanding the place of art in the general curriculum of the elementary school by correlation and integration, and by appreciation as a special subject. Problems are used to develop art skills, and to enable the teacher to understand the interests and abilities of the child.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Art 321. (Formerly Art 30.) Drawing and Illustration. **Three hours.**
Prerequisite: Art 117.
Emphasing skill in drawing and illustration of ideas; specific study of perspective; pictorial composition; illustration of stories; murals; media—pencil, charcoal, water color, and ink.

Art 322. (Formerly Art 31.) Color and Design. **Three hours.**
Prerequisite: Art 117.
Color theory as related to pigments and sensation; practical color notation; application of color in design.

Art 361. (Formerly Art 36.) Art Education in the Elementary School. **Three hours.**
Prerequisites: Art 117 and 260.
Designed to give teachers a knowledge of the theory and practice of art in their school problems; unit planning; materials and methods.

Art 390. (Formerly Art 33.) Art Appreciation: Survey. **Three hours.**
A survey of architecture, sculpture, painting, and the minor arts; art of the Near East; classical art; medieval art; Renaissance art; post-Renaissance art; art in the United States; primitive art; Oriental art.

Art 421. (Formerly Art 40.) Advanced Drawing, Painting and Design. **Three hours.**
Studio practice in drawing, painting and design; orchestration of colors; research in artist's media—charcoal, pastel, oil, and water color.

Art 422. (Formerly Art 41.) Advanced Pictorial Composition. **Three hours.**

Painting from nature; field trips; studio criticism; creative design problems in decorative landscape and figure composition—pencil, pastel, water color, oil, and tempera.

Art 423. (Formerly Art 42.) Art Appreciation: Architecture and Sculpture. **Three hours.**

Prerequisite: Art 390.

Achievements in architecture and sculpture of the following periods: Prehistoric, preclassical, Greek, Roman, Early Christian, Byzantine, Romanesque, Gothic, Renaissance, American, and contemporary.

Art 424. (Formerly Art 43.) Art Appreciation: Painting. **Three hours.**

Prerequisite: Art 390.

Great periods and masters of painting: Italian, Flemish, German, Spanish, Dutch, English, French, and American.

Art 461. (Formerly Art 46.) The Arts in the High School. **Three hours.**

Prerequisites: Art 117 and 260.

Survey of art in the secondary schools for the purpose of examining the theories and practices in the rural and city high schools. Practice in planning units and courses of study which will give an understanding of our heritage in the arts, and an appreciation of art in daily living.

Art 462. Art Appreciation: Art Principles. **Two hours.**

Prerequisite: Art 424.

Designed for the study of aesthetic standards in architectural, sculptural and pictorial composition; current art principles; taste and evaluation; analysis of selected examples of art.

BIOLOGY

(Recommended Curriculum for the Training of Teachers of the Sciences with right of Teaching Certificate)

First Year

First Semester	Hours	Second Semester	Hours
Biology 121	5	Biology 122	5
Chemistry 111	5	Chemistry 112	5
English 101	3	English 102	3
Mathematics 107	3	Library Science 166	1
Physical Education 110	½	Mathematics 113	3
Sociology 100 (Women)	1	Physical Education 110	½
	17½		17½

Second Year

Biology 229	3	Biology 325	3
English 211	3	English 212	3
History 141 or 202	3	History 142 or 203	3
Physical Education 110	½	Physical Education 110	½
Physics 201	5	Physics 202	5
Elective	3	Elective	2
	17½		16½

Third Year

Biology 335	2	Biology 345	2
Chemistry 310	5	Chemistry 212	5
Geology 201	3	Education 211	3
Physics	3	Physics	3
Science 471	2	Science 410	2
Elective	2	Elective	2
	17		17

Fourth Year

Education 383	3	Education 364	6
Health 201	3	Education 463	10
Physical Education 225	2		
Physics	3		
Elective	6		
	17		16

Physics must be chosen by the student with the approval of the head of the department. Physics 131, 132 and 203 may be substituted for Physics 201 and 202.

BIOLOGY

(Recommended curriculum for a major in Biology with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Biology 121	5	Biology 122	5
English 101	3	English 102	3
Mathematics 107	3	Library Science 166	1
Physical Education 110	½	Mathematics 113	3
Social Science	3	Physical Education 110	½
Sociology 100 (Women)	1	Social Science	3
Elective	2	Elective	2
	17½		17½

Second Year

Biology 242	5	Biology 229	3
Chemistry 111	5	Biology 335	2
English 211	3	Chemistry 112	5
Physical Education 110	½	English 212	3
Elective	3	Physical Education 110	½
		Elective	3
	16½		16½

Third Year

Biology 336	2	Biology 345	2
Education 211	3	Biology 325	3
Physics 131 or 201	5	Physics 132 or 202	5
Elective	6	Elective	6
	16		16

Fourth Year

Biology 343	3	Education 364	6
Education 383	3	Education 463	10
Health 201	3		
Physical Education 225	2		
Science 471	2		
Elective	3		
	16		16

Recommended Curriculum for a Second Major in Biology

With right of teaching certificate.—A student with a first major in some other department may take the following courses for a second major in Biology: Biology 121, 122, 229, 325, 335, 345, and 4 hours elective.

Recommended Curriculum for a Minor in Biology

A student with a major and a minor in other departments may take the following courses for a minor in Biology: Biology 121, 122, and 8 hours elective.

BIOLOGY

(Recommended curriculum for a major in Biology without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Biology 121	5	Biology 122	5
English 101	3	English 102	3
Mathematics 107	3	Library Science 166	1
Physical Education 110	½	Mathematics 113	3
Social Science	3	Physical Education 110	½
Sociology 100 (Women)	1	Social Science	3
Elective	2	Elective	2
	17½		17½

Second Year

Biology Elective	5	Biology Elective	5
Chemistry 111	5	Chemistry 112	5
English 211 or Modern Language	3	English 212 or Modern Language	3
Physical Education 110	½	Physical Education 110	½
Elective	3	Elective	3
	16½		16½

Third Year

Biology Elective	3	Biology Elective	3
Physics 131 or 201	5	Physics 132 or 202	5
Elective	8	English 131 or 212	3
		Elective	5
	16		16

Fourth Year

Elective	16	Elective	16

Recommended Curriculum for a Second Major in Biology

Without right of teaching certificate.—A student with a first major in some other department may take the following courses for a second major in Biology: Biology 121, 122, and 14 hours elective.

BIOLOGY

LOWER DIVISION COURSES

Biology 121. (Formerly Biology 12 and 20.) General Botany. **Five hours.**
Biology of plants. An introductory study of the structure, physiology, ecology and phylogeny of plants, with emphasis on basic biological principles. Three lecture and four laboratory hours. Fee, $1.50.

Biology 122. (Formerly Biology 11.) Biology of Animals. **Five hours.**
General Zoology. An introductory study of the structure, physiology, ecology, phylogeny and economics of animals, with emphasis on basic biological principles. Three lecture and four laboratory hours. Fee, $1.50.

Biology 219. (Formerly Biology 29 and 29h.) Physiology. **Three hours.**
Offered for home economic students and for students who have not had Science 111 or 112, or Biology 122.
Fundamental principles of human physiology, with emphasis on the functioning of the circulatory, respiratory, digestive and excretory systems. Two lecture and two laboratory hours. Fee, $1.50.

Biology 225. (Formerly Biology 25.) Applied Anatomy. **Three hours.**
Prerequisites: Science 111 and 112, or Biology 122.
Anatomy of the human body, with emphasis on the skeleton, muscles and nervous system and their function in physical exercise. One lecture and four laboratory hours. Fee, $1.50.

Biology 229. (Formerly Biology 29.) Human Physiology. **Three hours.**
Prerequisite: Science 111 or 112, or Biology 122.
Fundamental principles of human physiology, with emphasis on the functioning of the circulatory, respiratory, digestive and excretory systems. Two lecture and two laboratory hours. Fee, $1.50.

Biology 242. (Formerly Biology 27 and 28.) Comparative Anatomy. **Five hours.**
Prerequisite: Biology 122.
Chordate characteristics and taxonomy; comparative anatomy of the principal organ systems: emphasis in laboratory upon lower chordate, fish, amphibian, bird and cat. Three lecture and four laboratory hours. Fee, $1.50.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Biology 325. (Formerly Biology 35.) Genetics. **Three hours.**
Prerequisite: Science 112 or Biology 121 or 122.
Laws governing inheritance, variations and evolution in plants, animals and man; the role of heredity in the improvement of cultivated plants, domesticated animals and the human race. Three lecture hours.

Biology 332. (Formerly Biology 21.) Plant Morphology. **Three hours.**
Prerequisite: Biology 121.
A comparative morphology of the plant phyla. Two lecture and three laboratory hours. Fee, $1.50.

Biology 334. (Formerly Biology 32.) Plant Physiology. **Three hours.**
Prerequisite: Biology 121.
A study of the chemical, physical and biological processes which occur in vascular plants. Two lecture and three laboratory hours. Fee, $1.50.

Biology 335. (Formerly Biology 30.) Local Flora. **Two hours.**
Prerequisite: Biology 121.
The identification, classification and phylogeny of vascular plants; principle of taxonomy; field trips required. Four laboratory hours. Fee, $1.50.

Biology 336. (Formerly Biology 31.) Woody Plants. **Two hours.**
The identification and classification of local trees and shrubs; key construction. Four laboratory hours. Fee, $1.50.

Biology 343. (Formerly Biology 37.) Economic Entomology. **Three hours.**
Prerequisite: Biology 122.
Taxonomy, identification, life histories, physiology, economic importance, methods of control and collection of insects, with emphasis on local forms. One lecture and four laboratory hours. Fee, $1.50.

Blology 344. (Formerly Biology 38.) Bird Study. **One hour.**
Taxonomy, identification, habits and economic importance of birds, with emphasis on field observation of local species. Two laboratory hours.

Biology 345. Field Zoology. **Two hours.**
Taxonomy, identification, habits and economic importance of local animals, with emphasis on vertebrates. One lecture and two laboratory hours. Fee, $1.50.

Biology 347. (Formerly Biology 47.) Embryology. **Four hours.**
Prerequisite: Biology 242.
Detailed study of the embryology of the starfish, frog, and chicken, with some consideration of mammalian embryology. Two lecture and four laboratory hours. Fee, $1.50.

Biology 433. Economic Plants. **Two hours.**
Prerequisite: Biology 121.
The economic importance of plants and plant products; the utility of plants in relation to wood products, textiles, foods, condiments, beverages, drugs, poisons; the role of plants in ornamentation, conservation and world events. Two lecture hours.

Biology 441. (Formerly Biology 44.) Invertebrate Zoology. **Four hours.**
Prerequisite: Biology 122.
Characteristics, life histories, taxonomy, ecology and evolution of the invertebrates. Two lecture and four laboratory hours. Fee, $1.50.

Biology 444. (Formerly Biology 45.) Parasitology. **Three hours.**
Prerequisite: Biology 122.
The morphology, life histories, epidemology and methods of diagnosis and control of animal parasites, with emphasis upon those of man and domesticated animals. Two lecture and three laboratory hours. Fee, $1.50.

Biology 446. (Formerly Biology 46.) Histology. **Four hours.**
Prerequisite: Biology 242.
The histology of permanent animal tissues; the technique of the preparation of animal tissues for microscopic study. One lecture and six laboratory hours. Fee, $1.50.

Biology 481. (Formerly Biology 48.) Animal Physiology. **Four hours.**
Prerequisite: Biology 242.
Detailed study of the chemistry and physics of the physiological activities of animals. Two lecture and four laboratory hours. Fee, $1.50.

GRADUATE DIVISION COURSE

Biology 511. Advanced Biology. **Three hours.**
Prerequisite: A major or minor in biology and permission of instructor.
Individual study in fields of biology which are in advance of the work offered on the undergraduate level.

CHEMISTRY

(Recommended curriculum for the training of teachers of the Sciences with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Biology 121	5	Biology 122	5
Chemistry 111	5	Chemistry 112	5
English 101	3	English 102	3
Mathematics 107	3	Library Science 166	1
Physical Education 110	½	Mathematics 113	3
Sociology 100 (Women)	1	Physical Education 110	½
	17½		17½

Second Year

Biology 229	3	Biology 325	3
English 211	3	English 212	3
History 141 or 202	3	History 142 or 203	3
Physical Education 110	½	Physical Education 110	½
Physics 201	5	Physics 202	5
Elective	3	Elective	2
	17½		16½

Third Year

Biology 335	2	Biology 345	2
Chemistry 310	5	Chemistry 212	5
Geology 201	3	Education 211	3
Physics Elective	3	Physics Elective	3
Science 471	2	Science 410	2
Elective	2	Elective	2
	17		17

Fourth Year

Education 383	3	Education 364	6
Health 201	3	Education 463	10
Physical Education 225	2		
Physics Elective	3		
Elective	6		
	17		16

Physics must be chosen by the student with the approval of the head of the department. Physics 131, 132, and 203 may be substituted for Physics 201 and 202.

CHEMISTRY

(Recommended curriculum for a major in Chemistry with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Biology 121	5	Biology 122	5
Chemistry 111	5	Chemistry 112	5
English 101	3	English 102	3
Physical Education 110	½	Library Science 166	1
Social Science	3	Mathematics 107	3
Sociology 100 (Women)	1	Physical Education 110	½
	17½		17½

Second Year

Chemistry 211	4	Chemistry 212	5
Mathematics 113	3	Physical Education 110	½
Physical Education 110	½	Physics 132 or 202	5
Physics 131 or 201	5	Social Science	3
Electives	4	Elective	3
	16½		16½

Third Year

Chemistry 310	5	Education 211	3
Chemistry 415	5	English 212	3
English 211	3	Science 410	2
Electives	3	Electives	8
	16		16

Fourth Year

Education 383	3	Education 364	6
Physical Education 225	2	Education 463	10
Health 201	3		
Electives	8		
	16		16

Recommended Curriculum for a Second Major

A student with a first major in some other department may take the following courses for a second major in Chemistry: Chemistry 111, 112, 211, 212, 310.

Recommended Curriculum for a Minor in Chemistry

A student with a major and a minor in other departments may take the following courses for a minor in Chemistry: Chemistry 111, 112, 211, 212.

CHEMISTRY

(Recommended curriculum for a major in Chemistry without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Chemistry 111	5	Chemistry 112	5
English 101	3	Commerce 151	2
History 141	3	English 102	3
Library Science 166	1	History 142	3
Mathematics 107	3	Mathematics 108	2
Physical Education 110	½	Mathematics 113	3
Physics 107	1	Physical Education 110	½
Sociology 100 (Women)	1		
	17½		18½

Second Year

Biology 121	5	Biology 122	5
Chemistry 211	4	Chemistry 212	5
English 211	3	English 212	3
Mathematics 232	3	Mathematics 251	5
Physical Education 110	½	Physical Education 110	½
Elective	2		
	17½		18½

Third Year

Chemistry 310	5	Chemistry 312	5
Foreign Language	3	Commerce 230	3
Mathematics 352	3	Foreign Language	3
Physics 201	5	Physics 202	5
	16		16

Fourth Year

Chemistry 320	3	Chemistry 416	5
Chemistry 415	5	Physics Elective	3
Physics Elective	3	Elective	8
Elective	5		
	16		16

CHEMISTRY

LOWER DIVISION COURSES

Chemistry 111. (Formerly Chemistry 11.) General Chemistry. **Five hours.**

The fundamental theories and laws of inorganic chemistry; the preparation, properties, and uses of the more common elements and their compounds; explanation of chemical symbolism. Three lecture and four laboratory hours. Fee, $1.50.

Chemistry 112. (Formerly Chemistry 13.) General Chemistry. **Five hours.**

Continuation of the laws and theories of inorganic chemistry; study of organic chemistry, electro-chemistry, and the metals. Three lecture and four laboratory hours. Fee, $1.50.

Chemistry 211. (Formerly Chemistry 21 and 22.) Qualitative Analysis. **Four hours.**

Prerequisites: Chemistry 111 and 112.

Reactions of cations and anions; solutions; equilibrium; oxidation and reduction; hydrogen-ion concentration and pH; complex-ion formation. Two lecture and four laboratory hours. Fee, $1.50.

Chemistry 212. (Formerly Chemistry 23 and 24.) Quantitative Analysis. **Five hours.**

Prerequisite: Chemistry 211.

The principles and use of the analytical balance; care and use of analytical equipment; preparation of solutions, quantitative and qualitative; solubility product and laws of precipitation and solution; principles of stoichiometry; quantitative determinations of common metals and nonmetals by gravimetric, volumetric and electrolytic methods. Two lecture and six laboratory hours. Fee, $1.50.

Chemistry 220. (Formerly Chemistry 20.) Bio-organic Chemistry. **Four hours.**

(Open only to majors in home economics.)

Prerequisites: Chemistry 111 and 112.

A study of the applications of organic chemistry to food, nutrition and other problems in home economics. Two lecture and four laboratory hours. Fee, $1.50.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Chemistry 310. (Formerly Chemistry 26 and 27.) Organic Chemistry. **Five hours.**

Prerequisites: Chemistry 111 and 112.

Methane series and derivatives; ethylene series and derivatives; acetylene series and derivatives; polycyclic compounds; glucids, lipids, protids, and related compounds. Three lecture and four laboratory hours. Fee, $1.50.

Chemistry 312. (Formerly Chemistry 28.) Advanced Organic Chemistry. **Five hours.**

Prerequisite: Chemistry 310.

Aromatic hydrocarbons, aldehydes; phenols, amines, diazonium compounds; dyes, drugs, etc.; theory of color, molecular rearrangements, tautomerism, etc. Three lecture and four laboratory hours. Fee, $1.50.

Chemistry 313. (Formerly Chemistry 34.) Biochemistry. **Five hours.**
Prerequisite: Chemistry 310.
Qualitative tests for digested substances in vivo and in vitreo; chemical nature of muscle, blood and bone; enzyme action; urine analysis. Three lecture and four laboratory hours. Fee, $1.50.

Chemistry 320. (Formerly Chemistry 411 and 25.) Advanced Quantitative Analysis. **Three hours.**
Prerequisite: Chemistry 212.
Analysis of ores; potentiometric determinations; the principle and use of the colorimeter and polarimeter; gas analysis; water analysis; soil analysis; combustion train. Six laboratory hours. Fee, $1.50.

Chemistry 415. (Formerly Chemistry 41.) Physical Chemistry. **Five hours.**
Prerequisite: Chemistry 212.
The nature of the gaseous, liquid and solid states; thermo-chemistry and thermodynamics; solutions; colloids. Three lecture and four laboratory hours. Fee, $1.50.

Chemistry 416. (Formerly Chemistry 42.) Physical Chemistry. **Five hours.**
Prerequisite: Chemistry 415.
Continuation of Chemistry 415. Chemical equilibria; phase rule; chemical kinetics; electrochemistry; ionic equilibria; atomic and molecular structure. Three lecture and four laboratory hours. Fee, $1.50.

Chemistry 430. (Formerly Chemistry 49.) Problems in Chemistry. **Three hours.**
Prerequisite: Senior standing in chemistry and departmental approval.
Research in inorganic, organic, analytical, physical or biochemical problems. Six laboratory hours. Fee, $1.50.

COMMERCE

CLASSIFICATION OF COMMERCE COURSES

For certification purposes commerce courses are classified as follows:

Accounting: 119, 120, 221, 325, 326, 327, 328, 425, 441.

Secretarial Practice: 131, 151, 152, 215, 216, 253, 260, 301, 302, 303.

General Business: 100, 124, 230, 231, 260, 309, 310, 311, 324, 339, 341, 343, 405, 406, 407, 430, 431, 440, 443.

Methods and Materials: 461a, 461b.

Commerce courses counted as Social Science:

Commerce 124, 230, 231, 260, 309, 310, 311, 324, 430, 431, 510, 511.

COMMERCE

(Recommended curriculum for a major in the area of Commerce without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Commerce 100	3	Commerce 119	3
Commerce 131	1	Commerce 152	2
Commerce 151	2	English 102	3
English 101	3	Health 100	2
Physical Education 110	½	Library Science 166	1
Science 109 or 111	3	Physical Education 110	½
Social Science 100	3	Science 110 or 112	3
Sociology 100 (Women)	1	Social Science 101	3
	16½		17½

Second Year

Commerce 120	3	Commerce 221	3
Commerce 230	3	Commerce 231	3
English 211	3	English 212	3
Foreign Language or Mathematics	3	Foreign Language or Mathematics	3
History 141	3	History 142	3
Physical Education 110	½	Physical Education 110	½
Elective	1 or 2	Elective	1 or 2
	16½ or 17½		16½ or 17½

Third Year

Commerce 405	3	Commerce 301	3
Commerce Elective	3	Commerce 309	3
English 131 or 231 or 301 and 2 hrs.	3 or 4	Commerce Elective	3
Geography 221	3	Restricted Elective	3
Restricted Elective	3	Elective	4 or 5
Elective	1 or 2		
	16 or 18		16 or 17

Fourth Year

Commerce Elective	9	Commerce Elective	7
Restricted Elective	3	Elective	9
Elective	4 or 5		
	16 or 17		16

COMMERCE

(Recommended curriculum for a major in the area of Commerce with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Commerce 100	3	Commerce 119	3
Commerce 131	1	Commerce 152	2
Commerce 151	2	English 102	3
English 101	3	Health 100	2
Physical Education 110	½	Library Science 166	1
Science 109 or 111	3	Physical Education 110	½
Social Science 100	3	Science 110 or 112	3
Sociology 100 (Women)	1	Social Science 101	3
	16½		17½

Second Year

Commerce 120	3	Commerce 221	3
Commerce 215	3	Commerce 216	3
Commerce 253	2	English 212	3
Commerce 280	1	Health 201	3
English 211	3	History 142	3
History 141	3	Physical Education 110	½
Physical Education 110	½	Elective	2
Elective	1 or 2		
	16½ or 17½		17½

Third Year

Commerce 230	3	Commerce 231	3
Commerce 302	3	Commerce 309	3
Commerce 405	3	Commerce 461a	2
Education 211	3	Commerce Elective	3
Physical Education 225	2	Education 383	3
*Elective	3	**Gen. Educ. Elective	3
	17		17

Fourth Year

Commerce 461b	2	Education 364	6
Commerce (Gen. Business) Elective	7	Education 463	10
Elective	7 or 8		
	16 or 17		16

* Selection should be made from the fields of Fine Arts, Foreign Language, Mathematics, Agriculture, Home Economics, and Industrial Arts.

** The student should select a subject in the same field as that selected for the General Education elective in the first semester of this year.

A student with a major in some other department may take a major in Commerce with emphasis in Secretarial Practice, General Business, or Accounting. For the Secretarial Practice major the following courses are required: 131, 151, 152, 215, 216, 230, 253, 302, 461a, and 5 hours elective. For the General Business major the following courses are required: 100, 119, 120, 151, 221, 230, 231, 309, 405, 461b. For the Accounting major the following courses are re-

quired: 119, 120, 151, 221, 230, 231, 309 or 405, 461b, and 5 hours elective in Accounting.

A student with a major and a minor in some other departments may take a minor in Commerce:

Com. 100, 151, 152, 119, 120, 5 hours elective, or

Com. 100, 151, 152, 119, 253, 215, and 216.

COMMERCE

LOWER DIVISION COURSES

Commerce 100. (Formerly Commerce 126 and Commerce 14a and 14b.) Business Mathematics. **Three hours.**

Rapid calculation in the fundamental processes; drawings and graphs; percentage; buying and selling merchandise; commercial discounts; recording purchases and sales; paying for goods; collecting bills; accounts; fractions; aliquot parts; decimal fractions; pay rolls; interest; installment buying; bank discount; partial payments; profit and loss; commission and brokerage; marked price; taxes; insurance; stocks; bonds; civil service problems.

Commerce 119. (Formerly Commerce 10.) Elementary Accounting. **Three hours.**

The accounting equation; the balance sheet; the profit and loss statement; books of original entry; the theory of debit and credit; the general ledger; adjusting and closing entries; the accounting cycle explained; using a minimum of books; subsidiary ledgers and controlling accounts. Practice sets of books are worked out by the students.

Commerce 120. (Formerly Commerce 11.) Principles of Accounting. **Three hours.**

Prerequisite: Commerce 119.

Credit transactions; promissory notes; interest; discount; valuation accounts; accrued and deferred items; business papers; the periodic summary; the theory of partnership accounting. A partnership set of books is worked out by the students.

Commerce 124. (Formerly Commerce 17.) Economic History of Europe. **Three hours.**

The history of the development of agriculture, commerce, transportation, industry, labor legislation, socialism, social insurance, population and population trends, and finance in the principal European nations.

Commerce 131. (Formerly Commerce 5.) Penmanship. **One hour.**

Characteristics of good handwriting; illustrations of good handwriting; practice in developing desirable skills in executing legible handwriting; methods of teaching handwriting.

Commerce 151. (Formerly Commerce 15a.) Beginning Typewriting. **Two hours.** Fee, $1.00.

Speed building technique; knowledge and care of the machine; personal and business letters; use of carbon paper; tabulating; term papers and notebooks.

Commerce 152. (Formerly Commerce 15b.) Intermediate Typewriting. **Two hours.** Fee, $1.00.

Prerequisite: Commerce 151 or its equivalent.

Speed building; business papers; manuscripts; reports; mimeograph; transcribing machine.

Commerce 215. (Formerly Commerce 27a.) Beginning Shorthand. **Three hours.**

Prerequisite: Commerce 151 or its equivalent.

Principles of Gregg shorthand; dictation and transcription.

Commerce 216. (Formerly Commerce 27b and part of Commerce 27c.) Advanced Shorthand. **Three hours.**

Continuation of Commerce 215.

Commerce 221. (Formerly Commerce 12.) Principles of Accounting. Three hours.

Prerequisite: Commerce 119, 120.

The voucher system; nature and characteristics of the corporation; corporation accounts and records; corporate earnings and surplus; corporation securities; accounting for manufacturing; departmental accounting; branch accounting; consolidated statements; budgets; personal accounting; analysis and interpretation of financial statements; accounting for management.

Commerce 230. (Formerly Commerce 28 and 29.) Principles of Economics. **Three hours.**

Industry and economics, production and related concepts; specialization; competition; cooperation; the time-consuming production process; combining the agents of production; the organization of the business enterprise; risk in industry; the monetary system; the banking system; the fluctuating price level; monetary aspects of economic balance; the business cycle; individual prices; the background of demand and supply; prices under pure and monopolistic competition; interrelated prices and the price system; the mechanism of international trade; the economy of international trade; the share of income; the wages of labor; interest; income from land; the profits of the business enterprises.

Commerce 231. (Formerly Commerce 39.) Principles of Applied Economics. **Three hours.**

Economic science and its application; consumption and the guidance of industry; wastes in production; unemployment and other forms of idle power; the integration of industry; efficiency in management; industrial unrest and conflict; industrial peace; profit-sharing and joint control industry; problems of population; efficiency in marketing; the price system and its control; regulation of public utility rates; control of banking in the United States; stabilizing our monetary system; business cycles and their control; free trade and protection; international debts and economic imperialism; the relation between government and industry; government regulation and ownership; financing the government; the revenue system of the United States; the problem of inequality; agricultural problems; types of economic organization; and important industries of the United States.

Commerce 253. (Formerly Commerce 16a.) Advanced Typewriting. **Two hours.** Fee, $1.00.

Prerequisite: Commerce 152 or its equivalent.

Advanced typing problems; use of office machines.

Commerce 260. (Formerly Commerce 26.) Consumer Economics. **Three hours.**

The role of consumers in economic life; consumers' choice; who guides consumers; freedom of choice; custom-made wants; choosing goods for display; fashion-made wants; imitative wants; producer-made wants; the profitable practice of fraud; price appeal; making it easy to buy; consumer educa-

tion; planning expenditures; intelligent buying; co-operative buying; buying protection; buying shelter; buying investments; producer aids to consumers; standards of consumers; governmental aids to consumers.

Commerce 280. (Formerly Commerce 18.) Filing. **One hour.**
Principles and practices of alphabetic, numeric, subject, and geographic filing.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Commerce 301. (Formerly Commerce 23.) Business English. **Three hours.**
The essential qualities of business writing; the sales letter; appeals to special classes; follow-up letters; inquiries, orders, and responses; credit letters; collection letters; adjustment letters; letters of application; business reports; style studies.

Commerce 302. (Formerly Commerce 27d.) Dictation and Transcription. **Three hours.**
Prerequisite: Commerce 301.
Shorthand vocabulary building; dictation; transcription of shorthand notes on the typewriter.

Commerce 303. (Formerly Commerce 27e.) Secretarial Practice. **Three hours.**
Correlation of business correspondence; shorthand; typewriting; secretarial problems; office experience.

Commerce 309. (Formerly Commerce 32.) Business Organization. **Three hours.**
Prerequisite: Commerce 230.
Classes of business organization, their evolution, and the tests of efficiency; individual entrepreneur organization; partnership; corporation; joint-stock company; business trusts; simple agreements and price combinations: pools; combination trusts; community-of-interest organization; holding company; amalgamations; mergers; promotion; underwriting; stock exchanges; reorganizations and receiverships; legislation.

Commerce 310. (Formerly Commerce 33a.) American Economic History. **Three hours.**
Historical development of commerce, industry, transportation, banking, labor problems, business organization, monetary problems, and agriculture in the United States from the settlement of the nation to the Civil War.

Commerce 311. (Formerly Commerce 33b.) American Economic History. **Three hours.**
Historical development of commerce, industry, transportation, banking, labor problems, business organization, monetary problems, and agriculture in the United States from the Civil War period to the present.

Commerce 324. (Formerly Commerce 38.) Money and Banking. **Three hours.**
Prerequisite: Commerce 230.
Nature and functions of money; kinds of money; monetary systems; history of banking; functions of the bank; bank administration; the national banking system; deposits and depositors; the clearing house; domestic and foreign exchange; loans and discounts; bank supervision; savings banks; trust companies; foreign banking systems; the federal reserve system.

Commerce 325. (Formerly Commerce 20a.) Principles of Accounting—Advanced. **Three hours.**

The accounting process illustrated; statements from incomplete data; cash and receivables; inventories; investments; fixed assets; deferred charges; liabilities; capital stock; surplus; installment sales; errors and their correction; statement of application of funds.

Commerce 326. (Formerly Commerce 20b.) Principles of Accounting—Advanced. **Three hours.**

Analysis of financial statements; partnership formation and operation; partnership dissolution and liquidation; joint ventures; consignments; agency and branch accounts; corporate combination and consolidated balance sheet; consolidated statement of profit and loss; statement of affairs; receivership accounts and statements.

Commerce 327. (Formerly Commerce 30.) Cost Accounting. **Three hours.**

Prerequisite: Commerce 119, 120, 221.

Basic cost accounting terminology; the cost accounting cycle; accounting entries for the cost accounting cycle; the voucher register in cost accounting; special ledgers used in cost accounting; materials control and accounting; material inventory records; accounting for labor in cost accounting work; factory wage system; manufacturing expenses; departmentalization of factory expenses; cost summaries and financial statements. A cost accounting set of books is worked out by the students.

Commerce 328. (Formerly Commerce 31.) Income Tax Accounting. **Three hours.**

Income tax legislation—Federal and State; returns for individuals; exempt income of individuals; deductions allowed individuals; computation of individual taxes; returns for corporations; accounting procedure; administrative procedure; the capital stock tax; the excess profits tax; the estate tax; the gift tax; excise taxes. Students will have experience filling out income tax return forms.

Commerce 339. (Formerly Commerce 34.) Mathematics of Finance. **Three hours.**

Bank discount; true discount and present value; exact interest; logarithms; equation of accounts; domestic and foreign exchange; series annuities; bond valuation; business graphs; cumulative annuities; cumulative sinking funds; cumulative amortization plans; building and loan association calculations; industrial loans.

Commerce 341. (Formerly Commerce 35.) Salesmanship. **Three hours.**

The art of selling; the motive behind all buying; the customer's mental journey; attitudes of buyer and salesman; preparation of the selling talk; the pre-approach; the interview; arousing interest; creating desire; answering objections; meeting excuses; diplomacy of the close; types of customers.

Commerce 343. (Formerly Commerce 37.) Advertising. **Three hours.**

The specific purpose of advertising; developing the copy; slogans; trademarks; layouts; engraving; scheduling of advertisements in newspapers and magazines; direct mail advertising; outdoor advertising; dealer display advertising; economic aspects of advertising; federal laws affecting advertising.

Commerce 405. (Formerly Commerce 40.) Business Law. **Three hours.**

Law in general, kinds of law; persons, torts; contracts; personal property; real property.

Commerce 406. (Formerly Commerce 41a.) Business Law. **Three hours.**

Agency; partnership; corporations; bailments; sales of personal property; market practices.

Commerce 407. (Formerly Commerce 41b.) Business Law. **Three hours.**
Negotiable contract, suretyship and guaranty; privileges of debtors; labor relations.

Commerce 425. (Formerly Commerce 46.) Accounting Problems. **Two hours.**
Prerequisite: Commerce 119, 120, 221.
This is an advanced course in accounting and the contents will be determined by the needs of the students registering for it.

Commerce 430. (Formerly Commerce 42.) Public Finance and Taxation I. **Three hours.**
Distribution of government burdens; the general property tax; modified property tax; shifting and incidence of taxation; the income tax; death and gift taxes; taxes upon business; consumption taxes; motor vehicle taxes; the poll tax; social security taxes; taxes on natural resources; non-tax revenue.

Commerce 431. (Formerly Commerce 43.) Public Finance and Taxation II. **Three hours.**
A continuation of Commerce 430.
The power of tax; tax limitations; inter-governmental relations in taxation; public expenditures; state and federal aid; economy in expenditures; problems of public borrowing; fiscal administration.

Commerce 440. (Formerly Commerce 44.) Investments. **Three hours.**
Characteristics of bonds; characteristics of stocks; securities markets; investment banking; sources of investment information; interpreting financial news; taxation of securities; investors of limited means; analysis of securities.

Commerce 441. (Formerly Commerce 47.) Auditing. **Three hours.**
Preliminary arrangements for an audit; general procedure of an audit; the original records; the asset accounts; the liability accounts; operating accounts; the audit report. An auditing problem is worked to illustrate the principles discussed in class.

Commerce 443. (Formerly Commerce 45.) Marketing. **Three hours.**
Prerequisite: Commerce 28.
Consumer's buying motives; marketing functions and institutions; selling direct to consumer; earlier and simpler types of retail institutions; department stores; mail-order houses; chain stores; agricultural wholesale markets; middlemen of the city agricultural markets; classes and types of wholesaler; raw materials; cooperative marketing; speculation; prices and some price policies; brands and brand policies; ethical aspects of marketing.

Commerce 461a. (Formerly Commerce 36a.) Methods of Teaching Stenography. **Two hours.**
Prerequisites: Commerce 152 and Commerce 216 or their equivalent.
This course is a prerequisite to student teaching in commerce. Survey of modern methods of teaching Gregg shorthand and typewriting; lesson planning and presentation; observation of classroom procedures; supplies and equipment; development of skill in writing shorthand on the blackboard.

Commerce 461b. (Formerly Commerce 36b.) Methods of Teaching Bookkeeping, Accounting, and General Business. **Two hours.**
This course is a prerequisite to student teaching in commerce.
Objectives in giving bookkeeping, accounting, and general business courses; textbooks suitable for use; supplementary material; methods of approach; how to teach certain phases of our financial life; communication; travel and transportation; buying and selling; the work at the end of a fiscal period for bookkeepers and accountants, including accrued and deferred items, adjusting entries, working sheets, financial statements, closing entires; suitable examinations.

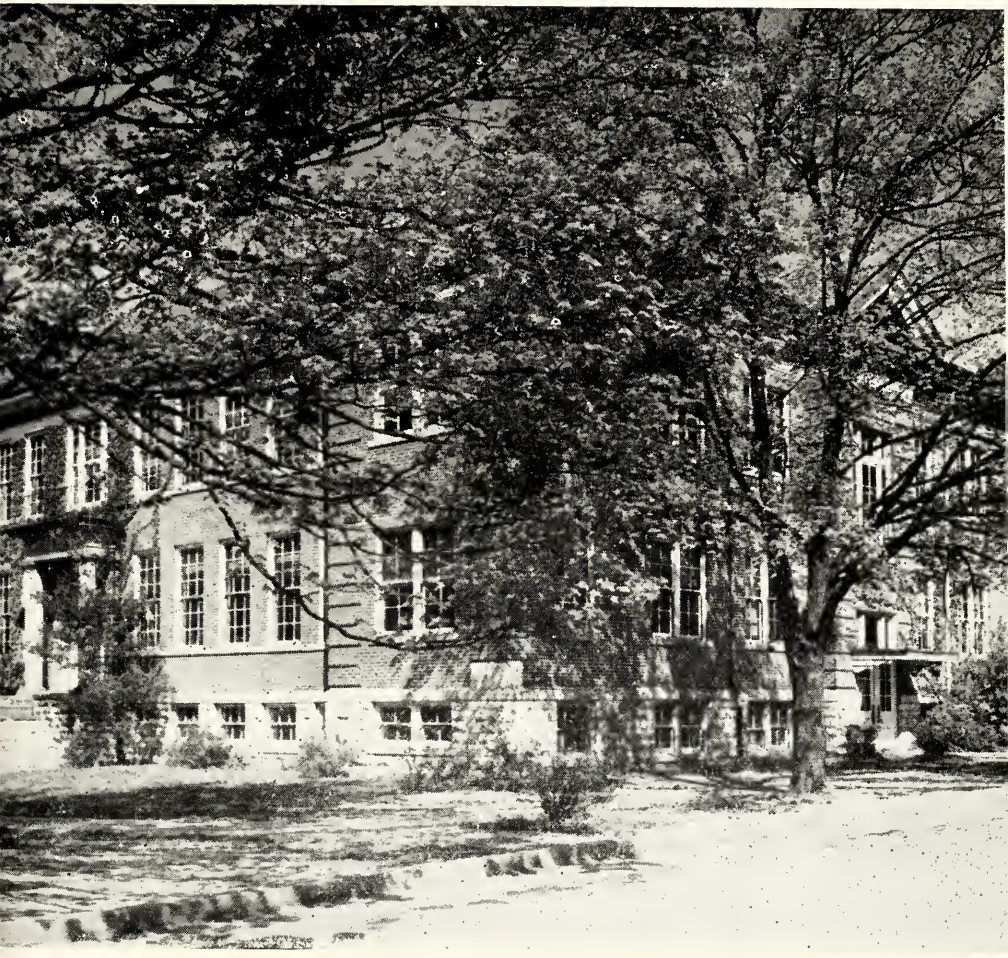
GRADUATE DIVISION COURSES

Commerce 510. (Formerly Commerce 50.) History of Economic Thought. **Three hours.**

In this course a survey of economic thought and doctrine from the ancient period to the end of the classical period will be made.

Commerce 511. (Formerly Commerce 51.) Economic Thought Since the Austrian School. **Three hours.**

This is a continuation of Commerce 510. The chief economical doctrines since the Austrian school will be studied.



CAMMACK BUILDING
The Elementary Training School

EDUCATION

(Recommended curriculum for a major in Elementary Education with right of Standard Elementary Teaching Certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
History 141 or 202	3	History 142 or 203	3
Library Science 166	1	Physical Education 110	½
Physical Education 110	½	Science 110 or 112	3
Science 109 or 111	3	Elective	6
Social Science Elective	3		
Sociology 100 (Women)	1		
Elective	2		
	16½		15½

Second Year

Art 260	3	Education 260	3
Education 211	3	Education 267	8
Education 254	3	Health 201	3
English 260	3	Physical Education 110	½
Physical Education 110	½	Social Science Elective	3
Physical Education 220	2		
Science Elective (Biological or Physical Science)	3		
	17½		17½

Third Year

English (Literature)	3	Agriculture 243 or Sociology 331	3
Home Economics 310	2	English (Literature)	3
Music 260	3	Geography 271 or 372	3
Science 261	2	Music Elective	3
Social Science Elective	3	Science 262	2
Elective	3	Elective	2
	16		16

Fourth Year

Art Elective	3	Social Science Elective	3
Education 313	3	Elective	13
Education 463	8		
English 318	3		
	17		16

Art 217 and Industrial Arts 222 are recommended as electives leading to the Standard Elementary Certificate.

Recommended Curriculum for the Provisional Elementary Certificate

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	Education 190	3
History 141 or 202	3	English 102	3
Library Science 166	1	History 142 or 203	3
Physical Education 110	½	Physical Education 110	½
Science 109 or 111	3	Science 110 or 112	3
Social Science elective	3	Elective	3
Sociology 100	1		
Elective	2		
	16½		15½

Second Year

Art 260	3	Education 260	3
Education 211	3	Education 267	8
Education 254	3	Health 201	3
English 260	3	Music 260	3
Physical Education 110	½	Physical Education 110	½
Physical Education 220	2		
Elective	3		
	17½		17½

Art 217, English 131, and Industrial Arts 222 are recommended as electives leading to the Standard Elementary Certificates.

EDUCATION

LOWER DIVISION COURSES

Education 190. (Formerly Education 19a.) Rural School Organization and Management. **Three hours.**

Organizing the rural elementary school; daily program; school housekeeping; understanding pupils; playground activities; school equipment and supplies; keeping records and making reports; problems of attendance; school libraries and the use of textbooks; educative seatwork and supervised study; school marks and marking systems; pupil classification and promotion; testing and evaluating results; community cooperation; teacher qualifications and relationships.

Education 211. (Formerly Education 21.) Psychology of Development and Education. **Three hours.**

Problems in understanding human development and education; physical growth of the child and of the adolescent; language development: how behavior is motivated; development of emotional life; social development in childhood and adolescence; intellectual growth; the individual; the learner and the nature of learning in childhood and adolescence; personality development.

Education 254. (Formerly Education 22.) Reading in the Elementary School. **Three hours.**

Objectives of reading in the elementary school; reading in the primary and intermediate grades; the place of oral reading in the grades; individual differences in reading; word difficulties; phonics; measuring reading instruction; motivation; materials of instruction.

Education 260. (Formerly Mathematics 26.) Teachers' Arithmetic. **Three hours.**

Aims and objectives of arithmetic; value of problems; assignments; examinations; importance of accuracy and speed; value of drill; games; solutions of problems; methods of teaching arithmetic.

Education 267. (Formerly Education 26.) Directed Observation and Student Teaching. **Eight hours.**

Prerequisites: One semester in residence at Eastern; standing of "C".

Graduated approach to responsible teaching in the elementary school through experiences in study and discussion, directed observation, organizing materials, laboratory work, and gradual participation; experiences in the study of child behavior; the course of study; selection and organization of curriculum experiences; teaching the various school subjects; various types of teaching and learning techniques and devices; experiences in playground and noon-hour supervision; participation in community activities; techniques of guidance, counseling, testing, and evaluating pupil progress.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Education 301. (Formerly Education 30.) The Junior High School. **Two hours.**

Origin, development, and present status of the junior high school movement; the place of the junior high school in the public school system; the aims, purposes, and objectives of the junior high school; evaluation of types of programs; the junior high school plant; library, apparatus, and equipment of the junior high school.

Education 302. (Formerly Education 32.) Pupil Accounting. **Four hours.**

Relation of attendance to pupil progress; social and economic factors which affect attendance; school census; personnel records. In developing these topics a study will be made of personnel work in typical schools of Kentucky.

Education 303. Social Case Study. **Four hours.**

This course is designed for the training of attendance officers and covers a study of various approaches to understanding of the pupil with an educational setting as the basis of study. Some attention is given to social case work as it relates to the social and economic problems of the community.

Education 304. (Formerly Home Economics 36.) Vocational Home Economics Education. **Three hours.**

Prerequisite: Education 211.

The home economics teacher in the community; the needs of high school girls and the community; the planning of units of study and how to teach these through study of various teaching techniques.

Education 313. (Formerly Education 31.) Child Development and Psychology. **Three hours.**

Development before birth; the organism as a dynamic system; the organization of behavior; physical growth; motor development; the child in the home and family relationships; the child and his school; language development; emotional development; behavior difficulties and personality patterns; mental development in children; learning; interests of children—play, graphic and musical expression, reading, radio, and the movies; techniques of studying child development and of influencing behavior.

Education 314. (Formerly Education 34.) Adolescent Development and Psychology. **Three hours.**

Physical development; mental development; growth of intelligence; adolescent interests; emotional life; learning and forgetting; moral and religious development; adolescent personality; disturbances of personality; hygiene of adolescence; prediction of adolescent behavior; guidance of adolescent behavior.

Education 364. (Formerly Education 36.) Fundamentals of Secondary School Methods. **Four or six hours.**

Graduated approach to responsible room teaching through experiences in study and discussion, organizing materials, directed observation, laboratory work, and gradual participation; development of the American secondary school; experiences in the study of pupil behavior; selection and organization of curriculum experiences; variation in techniques of teaching in different types of learning; learning objectives, interests, methods, and materials in special fields; experiences involving management and co-curricular duties; experiences in human relationship.

Education 368. (Formerly Mathematics 31.) Elementary Statistical Methods. **Three hours.**

Methods of collecting data; methods of tabulation of data; uses and purposes of statistical methods; central tendencies; deviations; correlations; graphic methods.

Education 369. Audio-Visual Methods. **Three hours.**

A survey of various types of audio-visual aids; with instruction in the utilization of pictures, maps, graphs, slides, records, recorders, projectors, and other audio-visual materials.

Education 370. (Formerly Education 37.) Resource-Use Education. **Three hours.**

This course is designed to help teachers understand the dynamic role of education in developing resources—natural, human, and cultural—and to aid them in making better use of resources in teaching. Topics: meaning and objectives of resource-use education; analysis of state, regional, and national resources; selecting and organizing resource materials for effective teaching purposes; use of field trips, visual aids, readings, and other activities; sources of materials from state, regional, and national agencies; types of aids available to teachers; state, regional, and national planning for the conservation and wise use of resources; some principles of resource-use education.

Education 383. (Formerly Education 47.) Public School Administration and Supervision. **Three hours.**

This course deals with the total school system and is designed to give students a clear picture of the organization and administration of the public school system. Among the topics treated are the study of and participation in experiences leading to an understanding of principles and practices in the organization and administration of school systems; study of the functions of education in a democracy: function and scope of school administration and supervision; school organization and control; the work of school officials; the board of education and its work; major problems connected with the administration and supervision of public education.

Education 421a. (Formerly Education 40.) Measurement and Evaluation in the Elementary School. **Two hours.**

Growth of measurement and evaluation; types of tests and evaluative procedures; test construction: selecting, giving, scoring, and interpreting tests; tests of intelligence and of special aptitudes; measurement and evalua-

tion in arithmetic, language, spelling, handwriting, the social sciences, art and music, miscellaneous areas, and general achievements; uses of tests and evaluative techniques.

Education 421b. (Formerly Education 41.) Measurement and Evaluation in the Secondary School. **Two hours.**

Growth of measurement and evaluation; types of tests and evaluative procedures; test construction; selecting, giving, scoring, and interpreting tests; tests of intelligence and of special aptitudes; measurement and evaluation in language, mathematics, science, social studies, special subjects, general achievement, and personality adjustment; uses of tests and evaluative techniques.

Education 441. (Formerly Education 43.) The Elementary School Curriculum. **Three hours.**

Objectives of education in light of society; function of the school; function of the curriculum; the curriculum as related to the objectives of education and to society; criteria for evaluating curricula; need and procedure for curriculum construction and revision.

Education 442. (Formerly Education 42.) Administration and Supervision of the Elementary School. **Three hours.**

Aims and objectives of the elementary school; types of elementary school organization; time allotments; attendance; library service; classification and promotion of pupils; health; publicity; special classes; plant; office management; organization for supervision; the principal and his opportunity for leadership.

Education 461. (Formerly Education 45.) High School Administration and Supervision. **Three hours.**

Scope and function of administration; administration of the program of studies; the vocational program; the health program; the extracurriculum; the guidance program; the program for individual differences; schedule of classes; personnel and organization; buildings and grounds; equipment and supplies; office standards; procedures and forms; the school and the community.

Education 463. (Formerly Education 46.) Supervised Student Teaching. **Eight or ten hours.**

Observation, participation, and responsible room teaching; child study with special case study problems and remedial work; development of skills and techniques desirable for good school procedure, the location, collection, and organization of materials for instruction; study of community occupations, resources, social and economic problems; experience in meeting parents, visiting homes, participation in social programs of school and community; experience in directing various kinds of activities including routine school duties, field trips, and extracurricular program; acquaintance with the school organization, school policies, system of records and the like; learning how to maintain desirable pupil-teacher relationship.

Education 464. (Formerly Education 44.) Principles of Secondary Education. **Three hours.**

Growth and background of the American secondary school; variability and selection of the pupil; aims and functions of secondary education; relation to elementary and higher education; forms of organization; comparison between European and American secondary schools; the rural school; vocational education; trends and methods of curriculum construction; the secondary school offerings; extracurricular activities; guidance and community relationship; vision of secondary education.

Education 466. (Formerly Home Economics 46.) Advanced Methods in Home Economics. **Three hours.**

Prerequisite: Education 304 or taken concurrently.

The student has an opportunity to prepare some teaching materials, visit other schools, become familiar with part-time and adult programs, lunchrooms, keeping of records, clubs, and assembly programs.

GRADUATE DIVISION COURSES

Education 501. (Formerly Education 50a.) School Administration I. **Three hours.**

Federal relations to education; the state as a fundamental school unit; general school law and court decisions relating to public education; powers and duties of state school officials; work of the state department of education; local units for school control; powers and duties of local school officials; administration of adult education and other types of special education; the administration of teacher personnel; public-school relations.

Education 502. (Formerly Education 50b.) School Administration II. **Three hours.**

Administration of pupil accounting; the school census; attendance; records and reports; organization and administration of the supervisory program; curriculum administration; selection of school sites; building plans and designs; school building management; operation and maintenance of the school plant; selection and use of equipment and supplies; organization of school libraries; auxiliary agencies; administration of health education; school consolidation and transportation; office administration.

Education 503. (Formerly Education 50c.) School Administration III. **Three hours.**

The school finance situation; state and local problems of school finance; sources of public-school revenues; preparation and administration of the budget; cost accounting; financial records and reports; types of fiscal control; school indebtedness; short-term borrowing; school bonds; preparation and administration of the salary schedule; financial aspects of school publicity; educational inequalities; units of school support; apportioning school funds; economies in school administration.

Education 510. (Formerly Education 51a and 51c.) Curriculum Problems and the Improvement of Instruction in Elementary Schools. **Three hours.**

Meaning and function of education; underlying principles developed for curriculum use and curriculum revision; interpretation of the learning experiences (school subjects in light of the meaning and function of education); study of concrete materials and classroom procedure with a representative range of practical problems in various subject areas; types of organization used in modern instruction; how children learn; various educational agencies in the community; how the school may be made a real community center; laboratory study and field trips.

Education 511. (Formerly Education 51b.) Rural School Supervision. **Three hours.**

Objectives and problems of rural school supervision; techniques and functions of supervision; current practices in rural supervision; problems of organizing instruction to meet increasing responsibilities of rural schools; analyzing teachers' difficulties: planning supervisory programs; selecting and organizing instructional materials; locating and using community resources and other aids available to rural teachers; techniques for developing desir-

able professional relations; problems of in-service education for rural teachers. Each member of the group will plan a supervisory program for a local school system in Kentucky as a special project in the course.

Education 515. (Formerly Education 52.) Human Development and the Psychology of Learning. **Three hours.**

Developmental factors and individual differences; motives, goals, and purposes; arranging the learning situation; problem solving and creative expressions; acquiring skill and information; transfer; the curriculum; social setting for learning; evaluation of development and learning.

Education 516. Counseling Techniques. **Three hours.**

An intensive study of the principles and techniques for guidance and counseling in schools. Recent developments are evaluated and effective programs are given special attention.

Education 519. Clinical Study of Exceptional Children. **Three hours.**

Methods are studied for diagnosing and teaching brilliant, retarded, physically handicapped, and emotionally maladjusted children.

Education 521. (Formerly Education 53.) Audio-visual Education. **Three hours.**

Meaning and value of audio-visual aids; fundamental principles developed for the selection, organization, and utilization of audio-visual materials; detailed study of various sources of visual aids; formation of standards for evaluation; laboratory study and field trips. Special attention is given to problems of organizing these materials in a school.

Education 522. (Formerly Education 54.) Personality Development and Adjustment. **Three hours.**

Foundations of personality; human development and personality; the home and personality; the school and personality; the social order and personality; frustration and aggression; conflicts and other maladjustments; the analysis of personality; improving personality; educational implications of the psychology of personality; a case history illustrating the foregoing topics.

Education 531. (Formerly Education 55a.) History of Education. **Two hours.**

Brief survey of the history of education in ancient and medieval times with special reference to the contribution of Greece, Rome, and Christianity to modern education; educational influences of the Renaissance and the Protestant Reformation; the role of the doctrine of formal discipline; educational influence of Comenius, Rousseau, Pestalozzi, Frobel, and Herbart.

Education 532. (Formerly Education 55b.) History of Education in the United States. **Two hours.**

Rise and development of public education in the United States with special emphasis upon the work of Horace Mann; sociological, psychological, and scientific movements in education; desirable educational reorganizations; the influence of John Dewey; brief study of the development of public education in Kentucky.

Education 536. (Formerly Education 55c.) Philosophy of Education. **Two hours.**

Meaning and scope of philosophy and education; contrasting philosophies and conceptions of education; the nature and meaning of education in relation to the individual and the social order; education and democracy; social progress and social control; the nature of thinking; educational aims and values; subject matter and methodology in relation to the educative process; character education; evaluation and interpretation of present-day issues and problems in education.

Education 537. (Formerly Education 55d.) Comparative Education. **Two hours.**

Examination, comparison, and discussion of the background of conditions and theories which have resulted in the present practices in education in the world today with special emphasis upon the school systems and practices in Germany, France, England, Russia, Denmark, Sweden, China, Australia, Canada, Mexico, and representative South American countries. Comparisons will be made between education in America and in foreign countries.

Education 542. (Formerly Education 56.) Applied Statistical Methods. **Two hours.**

Prerequisite: Education 368.

Measurements in psychology and education; frequency distributions; measures of central tendency; measures of variability; applications of the normal distribution curve; reliability and significance of statistics; testing hypothesis; prediction and errors of prediction; correlation methods; reliability and validity of tests.

Education 543. Investigations in Rural Education. **Two hours.**

This course is designed to familiarize the student with the important problems in the field of rural education. Among the subjects considered are the problems of attendance, improvement of instruction, techniques of teaching, school consolidation and pupil transportation, school reorganization, libraries, playground activities, lunchrooms, community organizations, and the community school.

Education 550. (Formerly Education 57 and 57a.) Educational Sociology. **Three hours.**

Relation of sociology to education; sociological problems and their educational implications; social groups and institutions in relation to education; social forces and their significance in society; the sociological determination of educational objectives; social elements and values in the curriculum; democracy in school administration and supervision; essential elements of a socialized educational program.

Education 551. (Formerly Education 57b.) Problems in Vocational Education. **Two hours.**

Meaning and need of vocational education; basic principles formulated for the study of vocations and the application of these principles to intelligent selection of a vocation; comprehensive study of the factors determining an intelligent vocational choice including job analysis and analysis of human and economic resources. Emphasis is placed on how vocational education may function in the small as well as the large school system.

Education 561. (Formerly Education 58a.) High School Administration. **Two hours.**

Secondary school organization; the principal; the staff; the pupils; program of studies; schedules; community relationships; records and reports; articulation; library; plant; finance; other high school problems.

Education 563. (Formerly Education 58b and 58c.) Improvement of Instruction in the Secondary School. **Three hours.**

Aims of the public secondary schools; plans for evaluating curriculum procedures; qualities of good teaching; procedures of evaluating and improving classroom teaching; methods of making the school a more effective agency.

Education 565. Investigations in Reading. **Two hours.**

This course is designed for graduate students who desire to make a critical study of the investigative and theoretical literatures dealing with the teaching of reading in the elementary school.

Education 566. Investigations in Mathematics. **Two hours.**
This course is designed for graduate students who desire to make a critical study of the investigative and theoretical literatures dealing with the teaching of mathematics in the elementary school.

Education 567. Investigations in Social Studies. **Two hours.**
This course is designed for graduate students who desire to make a critical study of the investigative and theoretical literatures dealing with the teaching of social studies in the elementary school.

Education 569. (Formerly Education 59d.) Research in Education. **Two hours.**
Functions of educational research; types of research and the principal techniques of each type; bibliography; discovering educational problems for study; organization and interpretation of data; preparing and evaluating research reports; class discussions and reading reports.
Required of all graduate students who do not prepare a thesis.

Education 570. Seminar. **One hour.**

Education 571. Seminar. **One hour.**

Education 572. Seminar. **One hour.**
The Seminar is designed for students who are preparing a thesis in partial fulfillment of the requirements for the degree of Master of Arts in Education. If the thesis requirement is waived, Education 569, Research in Education, is required.

ENGLISH

(Recommended curriculum for a major in English with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
History 141	3	English 131 (or Eng. 231*)	3
Physical Education 110	½	History 142	3
Science 109 or 111	3	Library Science 166	1
Sociology 100	1	Physical Education 110	½
Elective	6	Science 110 or 112	3
		Elective	3
	16½		16½

Second Year

English 211	3	English 212	3
English 265	2	Education 211	3
Foreign Language	3	Foreign Language	3
Health 201	3	History 202 or 203	3
Physical Education 110	½	Physical Education 110	½
Physical Education 225	2	Elective	4
Elective	3		
	16½		16½

Third Year

Education 383	3	English 302	2
English 301	2	English Elective	3
English Elective	3	Foreign Language	3
Foreign Language	3	History 341 or 342	3
Elective	5	Elective	5
	16		16

Fourth Year

English 441	3	Education 364	6
English Elective	2	Education 463	10
Sociology 331	3		
Elective	8		
	16		16

English majors should select for their English electives one course in group 3 and at least one course each from two of the remaining groups and enough other courses to make a total of 26 hours in addition to English 101 and 102:

1. English 318, 321, 322
2. English 311, 312, 314, 317
3. English 421, 423, 424, 425
4. English 216, 201 or 202, 205, 262 or 263, 319, 325, 327

* If English 231 is elected, it should be postponed until the sophomore year.

A student with a first major in some other department may take the following courses for a second major in English: English 101, 102, 131 or 231, 211, 212, 301, 302, 441; and one course each from any three of the following groups to make a minimum of 24 hours exclusive of English 101 and 102:

1. English 318, 321, 322
2. English 311, 312, 314, 317
3. English 421, 423, 424, 425
4. English 201 or 202, 205, 216, 262 or 263, 265, 325

Students with second majors in English are urged to meet the requirements in foreign language for the first major if it is possible to do so.

A student with a major and a minor in other departments may take the following courses for a minor in English:

I. Literature—English 101, 102, 211, 212, 301, and one course each from the following groups to make a minimum of 18 hours exclusive of English 101 and 102:

1. English 131, 201, 202, 231, 265
2. English 216, 311, 314, 317
3. English 312, 318, 321, 322
4. English 421, 423, 424, 425

II. Speech and Dramatics—English 101, 102, 131, 211, 212, 231, 262 or 263, 264 or 431, 305 or 331, 311 or 312.

The student who wishes to major in English without right of certification to teach may follow the curriculum for the first major given above, but substitute other courses for those in education.

ENGLISH

LOWER DIVISION COURSES

English 101. (Formerly English 10a, 10b.) Spoken and Written Communication I. **Three hours.**

Study or review of the mechanics of expression, such as grammar, punctuation, spelling, and sentence structure; word study and good usage, including the use of the dictionary; practice in letter writing and in organizing and presenting, both in writing and speaking (especially in brief compositions and expository speeches) material from the student's experience and observation and from his reading and study; some practice in more effective reading and listening.

English 102. (Formerly English 10b, 10c.) Spoken and Written Communication II. **Three hours.**

Prerequisite: English 101.

Continued practice in organizing and presenting material as written and spoken composition. Longer compositions; at least one longish investigative paper which employs the elementary principles of research; paragraph structure and development; emphasis on reading and analysis; acceptable usage in speaking and writing.

English 131. (Formerly English 163, 12.) Fundamentals of Speech. **Three hours.**

Prerequisite: English 101.

Corrective work for posture and movement; applied science of voice production; characteristics of a pleasing voice; individual diagnosis of voice

qualities; tone-placing; enunciation; pronunciation; pitch, rate, and volume; much practice in individual speaking and reading under careful, constructive criticism.

English 201. (Formerly English 20a.) Journalism I. **Two hours.**
Prerequisite: English 101 and 102.
Survey of newspaper content; nature of news; special forms of news; news gathering; news writing; features and human interest stories; mechanics of news printing; news ethics; the school newspaper. (Note: Students taking this course are expected to work on the college newspaper and to attend and "cover" assembly or chapel programs).

English 202. (Formerly English 20b.) Journalism II. **Two hours.**
Prerequisite: English 101 and 102.
The newspaper as an organ of public opinion and an instrument of the general welfare; newspaper history; newspaper policies and trends; freedom and responsibility of the press; purposes and types of editorials; editorial technique; reading and analysis of editorials; editorial writing; press and radio; the informative newspaper and magazine article.

English 205. (Formerly English 31 and 305.) Discussion and Debate. **Three hours.**
Prerequisites: English 101 and 102.
Logic and semantics; process of persuasion in the formation of public opinion; application of discussion and debate as essential tools for reaching decisions in a democratic society.

English 211. (Formerly English 218, 21a.) Survey of Literature I. **Three hours.**
Prerequisites: English 101 and 102.
Selections from the great masterpieces of Greek and Latin poetry, drama, history, and philosophy; selections from Oriental, Hebrews, and Mohammedan literature; selections from medieval myth, saga, and romance; selections from the continental literature of the Renaissance; selections from modern French, German, and Russian literature; individual reading of some complete masterpieces.

English 212. (Formerly English 219, 21c.) Survey of Literature II. **Three hours.**
Prerequisites: English 101 and 102.
Anglo-Saxon poetry; romances of chivalry; ballads; Chaucer; Shakespeare and Elizabethan drama; Renaissance English lyrics; Milton; prose from Bacon to Pepys; prose of the New Classicism; poetry of the New Classicism; the Romantic poets; English prose of the nineteenth century; American essays and addresses; Victorian poets; nineteenth century American poets; the short story; the new English drama.

English 216. (Formerly English 22.) The Short Story. **Two hours.**
Prerequisites: English 101 and 102 and one course in literature.
Technique of the short story; development of the short story as a literary type; romanticism and realism in stories; the short story in America; short stories for the high school; the writing of a story or of a paper.

English 231. (Formerly English 23.) Public Speaking. **Three hours.**
Prerequisites: English 101 and 102.
Source and organization of speech materials; objective and audience considerations; practice in preparation and delivery of speeches for various occasions, purposes and audiences; speech criticism; parliamentary procedure with participation drills.

English 260. (Formerly English 24.) Literature for Children. **Three hours.**

Prerequisites: English 101 and 102.

Brief survey of the history of children's literature and a study of the literature itself under the following topics: Mother Goose, fairy tales, folklore and fables, realistic and fanciful stories, myths, epics and sagas, the romance cycles, poetry, fiction, biography, historical and geographical literature. Methods of teaching literature in the elementary grades are touched upon.

English 262. (Formerly 27a.) Dramatic Presentation I. **Two hours.**

Prerequisites: English 101, 102, or permission of instructor.

English 263. (Formerly English 363, 27b.) Dramatic Presentation II. **Two hours.**

Prerequisites: English 101 and 102.

English 264. (Formerly English 25.) Story Telling. **Three hours.**

Prerequisites: English 101, 102 and 260.

History of story telling; purpose and aim of story telling; story interests of childhood; preparing the story; telling the story; dramatizing the story; uses of the story in schoolroom subjects; study of a considerable stock of stories of a wide range of appeal; much practice in actual telling of stories to children; constructive analysis of each student's performance.

English 265. (Formerly English 26.) Grammar for Teachers. **Two hours.**

Prerequisites: English 101 and 102.

Parts of speech, syntax and sentence analysis; history of teaching of grammar; methods of testing and measuring progress.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

English 301. (Formerly English 30a.) Advanced Composition I. **Two hours.**

Required of juniors and seniors who have less than six hours of freshman English.

Required written reports, precis, recommendations; informational essays or feature articles, news stories, editorials; book reviews; critical essays; research articles. Students are encouraged to write with a view to submitting their articles to suitable periodicals for publication.

English 302. (Formerly English 30b.) Advanced Composition II. **Two hours.**

Prerequisite: English 301.

Practice in writing short stories, one-act dramas, radio and motion picture dramas, feature articles, critical essays, familiar essays. Students are encouraged to write with a view to submitting the writing to suitable agencies for publication.

English 311. (Formerly English 32a and 32b.) Shakespeare. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

Elizabethan England as a background for the Shakespearian drama; early Elizabethan drama; Elizabethan theories of comedy and tragedy; development of Shakespeare's dramatic genius; problems of authorship, chronology and texts; the great comedies, histories, and tragedies; rapid reading of many plays and more careful study of a few of the great plays.

English 312. (Formerly English 33.) Modern Drama. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

Ibsen and his influence; the free theater and the new drama on the continent; naturalism and expressionism; the independent theater and the dramatic revival in England; the Abbey Theater and the Irish Renaissance; American imitators of the European drama; the little theater movement; Eugene O'Neill and the repertory theater; experimental drama.

English 314. (Formerly English 34a and 34b.) The Novel. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

History, development, and survey of the English novel and the American novel from their beginnings to 1920; content and literary characteristics of the different types of novels; foreign influences; extensive reading and discussion of the different types of novels.

English 317. (Formerly English 35a and 35b.) Contemporary Literature. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

Creative writing of the last ten years and its roots in the immediate past; new influences, new names, new trends in fiction; consideration of the literature of escape, of self-revelation, and of social consciousness; new poets and poetic theories and techniques exemplified in current poetry; new dramatists and current dramatic theories and techniques; radio, motion picture, and stage drama; evaluation of book reviews and commercial organizations designed to influence book selection; extensive rather than intensive reading (not confined to any one nation).

English 318. (Formerly English 36.) Literature of the United States. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

Persistence of pioneer attitudes in American literature; the case for religious, political, personal, and economic freedom; from rugged individualism toward social concern; "woods longing" and the open road; quest for the ideal; inter-racial accommodation and conflict; progress toward realism; men and nature; men and machines; men and earth; literary evaluation; teaching techniques; writers as human beings; topics inherent in selected individual writings from colonial times to the present.

English 319. (Formerly English 461 and 40.) Kentucky Literature. **Two hours.**

Prerequisites: English 101 and 102, and two courses in literature.

The economic, political, social, and religious background of the early Kentuckians as expressed in their writings; ante bellum literature; the influence of the War Between the States; the rise of local color fiction; the revival of poetry; present-day writers and tendencies; ballads; seventeenth century survivals in the native idiom; opportunity for students to become familiar with the John Wilson Townsend Collection.

English 321. (Formerly English 37a.) Poetry and Prose of the Romantic Period. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

In poetry the rise, development, and culmination of Romanticism; the impact of German metaphysics; the development of poetic form in Wordsworth and Coleridge; the return to the past in Scott and Southey; revolt and satire in Byron; Shelley and democratic idealism; Keats and esthetics. In prose the development of the essay as a medium of self-expression, literary criticism, and social ideals, as exemplified in the writings of Lamb, Coleridge, Hazlitt, De Quincey, and Landor.

English 322. (Formerly English 37b.) Poetry and Prose of the Victorian Period. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

Social ideals, political principles, religious conceptions, scientific theories, and cultural changes as mirrored in the non-fictional prose of such Victorian writers as Macaulay, Carlyle, Newman, Mill, Spencer, Arnold, Huxley, Ruskin, Stevenson, and Pater. The poetic cycle from Tennyson to Housman, reflecting the religious faith and doubt, social reform and unrest, estheticism, and skepticism of the period.

English 325. Literature of the Old Testament. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

The reading of selected writings of the Old Testament for literary appreciation; the types of Old Testament literature—historical narratives, prophetic poetry, religious lyrics, secular lyrics, dramatic poetry, wisdom literature, short stories; social and moral ideals revealed; the reading aloud of great passages.

English 327. (Formerly English 39.) Books and the Modern Mind. **Two hours.**

Prerequisites: English 101 and 102, and two courses in literature.

Reading and discussion of modern books that have influenced modern thought and action; basic concepts of the physical universe, man, and society as found in such writers as Darwin, Marx, Frazer, and others; social applications in novels and plays; influence upon forms of literature and art; attempts at ethical and religious synthesis.

English 331. (Formerly English 38a and 38b.) Speech Correction. **Three hours.**

Prerequisites: English 101, 102, and 131 or 231.

Diagnostic and remedial procedures for functional disorders; the phonatory and articulatory aspects of speech development; analysis of physical and mental tests; corrective material and technique; foreign language influence; the case record.

English 421. (Formerly English 42.) Renaissance and Elizabethan Literature. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

Spirit of the Renaissance; influence of Italian and other continental literatures; early English humanists; Elizabethan enthusiasm; the Elizabethan language; new literary influences; chief literary forms; Spenser and Elizabethan poetry; the great sonneteers; Sidney and criticism; Bacon and scientific writing; the Shakespearian poetry; Ben Johnson, Drayton, and Daniel; prose fiction; Elizabethan drama.

English 423. (Formerly English 43.) Milton and the Puritan Period. **Two hours.**

Prerequisites: English 101 and 102, and two courses in literature.

The Puritan background; life of Milton as it affected his writings; his earlier poetry; development of his genius; the great epic Paradise Lost and its interpretation; Paradise Regained and Samson Agonistes; other writers of the period and their writings.

English 424. (Formerly English 44.) Chaucer and Medieval Story. **Two hours.**

Prerequisites: English 101 and 102, and two courses in literature.

Study of the various types of medieval story—the folk-epic, the beast tale, the metrical romance, the fabliau, the saint's legend, and the ballad—and of the social and moral ideals which they reveal.

English 425. (Formerly English 45.) The Age of Classicism. **Three hours.**
Prerequisites: English 101 and 102, and two courses in literature.
Social backgrounds of classicism; Restoration drama as a reaction against Puritanism; Dryden and the rise of the critical spirit; French and Graeco-Roman influences; the literary dictatorship of Dr. Johnson; the decay of literary patronage; new tendencies in Thomson, Cowper, Gray, Chatterton, Goldsmith, and Crabbe.

English 431. (Formerly English 435 and 46.) Interpretative Reading. **Three hours.**
Prerequisite: English 131 or its equivalent.
Sources of materials; techniques of interpretation; criteria for selecting readings, for preparing contestants and readers, and for judging contests; individual work under careful direction.

English 441. (Formerly English 47.) History of the English Language. **Three hours.**
Prerequisite: Two years of work in English toward a major or minor in English.
The family of languages; the Old English period; the Middle English period; modern English; the foreign and native elements in English; history of English vowel sounds; mutation and gradation; the consonants; English inflections; English accent; collateral readings in the less technical works on the English language.

GRADUATE DIVISION COURSES

English 511. The Development of English Drama to 1642. **Three hours.**
Medieval liturgical drama; early miracle plays and the guild cycles; morality plays and interludes; early Tudor Renaissance drama; the development of the theater; companies of actors; Marlowe, Lyly, Greene, Peale, and Nashe; Edward De Vere and the Shakespearian drama; Ben Johnson and the Stuart dramatists.

English 515. (Formerly English 52.) English Criticism. **Three hours.**
A study of the development of English criticism from its beginnings to the end of the nineteenth century. Foreign influences in English criticism; changing conceptions of the criteria of criticism; the great critics and their works.

English 565. (Formerly English 50 and 51.) Problems in High School English. **Three hours.**
A seminar for graduate students who wish to work on individual problems under the direction of an instructor.

FRENCH

A student may major in French by taking a minimum of **24** hours in French.

A student with a major and a minor in other departments may take a minimum of **18** semester hours for a minor in French.

LOWER DIVISION COURSES

French 101. (Formerly French 11.) Elementary French. **Three hours.**
Pronunciation; grammar; conversation in French on material studied.

French 102. (Formerly French 12.) Elementary French. **Three hours.**
Prerequisite: French 101 or one unit of high school French.
Continuation of grammar study begun in French 11 and oral work based on reading material.

French 201. (Formerly French 21.) Intermediate French. **Three hours.**
Prerequisites: French 101 and 102 or two units of high school French.
Grammar review; short history of French literature; notable examples of the French short story.

French 202. (Formerly French 22.) Intermediate French. **Three hours.**
Prerequisite: French 201 or three units of high school French.
Grammar review; three French novels.

UPPER DIVISION COURSES

(Open to Junior, Senior and Graduate Students)

French 301. (Formerly French 31.) French Prose Classics. **Three hours.**
Prerequisite: Two years of college French or the equivalent.
Intensive reading of a number of French prose classics with emphasis on the language structure; extensive reading of works by representative prose writers from the Middle Ages to the nineteenth century.

French 302. (Formerly French 32.) French Prose Classics. **Three hours.**
Prerequisite: French 301 or its equivalent.
Selected prose works of the nineteenth and twentieth centuries.

French 401. (Formerly French 41.) French Poetry. **Three hours.**
Prerequisites: Two years of college French or the equivalent.
The Medieval Period; the Renaissance; the Golden Age; Romanticism; the Parnassus School; Symbolism; contemporary tendencies in poetry.

French 402. (Formerly French 42.) French Drama. **Three hours.**
Prerequisite: French 401 or its equivalent.
The classical period: the eighteenth century; Romanticism; modern drama.

GEOGRAPHY

(Recommended curriculum for a major in Geography with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Geography 101	3	History 142	3
History 141	3	Library Science 166	1
Physical Education 110	½	Physical Education 110	½
Science 109 or 111	3	Science 110 or 112	3
Sociology 100 (Women)	1	Elective	6
Elective	3		
	16½		16½

Second Year

Education 211	3	English 212	3
English 211	3	Geography 202 or 230	2 or 3
Geography 271	3	Geography 221	3
Geology 201	3	Physical Education 110	½
Physical Education 110	½	Physical Education 225	2
Elective	4	Elective	6 or 5
	16½		16½

Third Year

Geography 372	3	Education 383	3
Geography Elective	3	Geography 373	3
Health 201	3	Geography 471	3
Elective	7	Geography 473	3
		Elective	4
	16		16

Fourth Year

Geography 305 or 474	2	Education 364	6
Geography 475 or 477	3	Education 463	10
Elective	11		
	16		16

Recommended Curriculum for a Minor in Geography

A student with a major and a minor in other departments may take the following courses for a minor in Geography: Geography 101, 221, 271, 372, 373, 471, and Geology 201.

GEOGRAPHY

(Recommended curriculum for a major in Geography without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Geography 101	3	History 142	3
History 141	3	Library Science 166	1
Physical Education 110	½	Physical Education 110	½
Science 109 or 111	3	Science 110 or 112	3
Sociology 100 (Women)	1	Elective	6
Elective	3		
	16½		16½

Second Year

English 211	3	English 212	3
Geography 271	3	Geography 202 or 230	2 or 3
Geology 201	3	Geography 221	3
Physical Education 110	½	Physical Education 110	½
Elective	7	Elective	8 or 7
	16½		16½

Third Year

Geography 372	3	Geography 373	3
Geography Elective	3	Geography 471	3
Humanities	3	Geography 473	3
Elective	7	Elective	7
	16		16

Fourth Year

Geography 305 or 474	2	Elective	16
Geography 475 or 477	3		
Elective	11		
	16		16

GEOGRAPHY

LOWER DIVISION COURSES

Geography 101. (Formerly Geography 10.) Principles of Geography: Elements and Factors. **Three hours. Fee .75.**

The field of modern geography; earth as a member of the solar system; earth's form and movements; geographical elements; elements of weather; climates of earth; the biotic factors; the physiographic factors; edaphic and pedologic factors; the mineral factors; the hydrographic factors; the spatial factors; the social factors; the geographic unit; geographic tools; a brief history of the changing aspects of geography.

Geography 102. Principles of Geography: Regions and Societies of the World. **Three hours.**

Prerequisite: Geography 101.

The nature of regional geography; regions of the continents; geographic patterns of mankind; population problems; man and his environment; human development of races, religions, governments, cultures, industries, institutions, occupations and activities; geography of cities; urban and rural groups; problems of today and tomorrow.

Geography 202. (Formerly Geography 20.) Climatology. **Three hours.**

Weather and weather observation; elements of climate; climatic regions of the world—a study of climate as affected by the physical factors of sun, mountains, land and water; changes in temperature, pressure, winds—direction and force; humidity; cloud phenomena, precipitation, and the major types of storms; forecasting; the climatic regions of the world; weather conditions and their relation to human activities.

Geography 221. (Formerly Geography 21.) Economic Geography of the Industries. **Three hours.**

The more important agricultural products—cereals, starch foods, forage crops, vegetable crops, fruit crops, wine industries, sugar, vegetable oils, condiments and tobacco vegetable fibers, non-food vegetables; the animal food stuffs, animal fibers, furs, skins; the mining industries; manufacturers—aluminum, automobile, copper, chemical textile, leather, iron and steel, paint, petroleum, rubber, etc.; trade routes, inland in North America and international trade routes; world trade centers.

Geography 230. (Formerly Geography 23.) World Democracy and Geopolitics. **Two hours.**

Geopolitics; the ideological conflict; backgrounds of nationalism; the global war and strategy; social factors; economic factors; political factors; physical factors; religion and war; educational impacts; cultural factors; health and physical fitness; land and ocean warfare; military factors; diplomacy and war; after war, what?

Geography 271. (Formerly Geography 22.) Geography of Anglo America. **Three hours.**

Prerequisite: Geography 101.

This course is a detailed study of the United States, Canada, and Alaska; structure and physiography; climate; the geographic regions of these three countries, such as the Spring Wheat Region, the Coasts of Newfoundland and Labrador, the North Pacific Coast and Mountains, the Yukon Valley, the Cotton Belt, the Lower Region, Central California, etc.

UPPER DIVISION COURSES

(Open to Junior, Senior and Graduate Students)

Geography 300. (Formerly Geography 30.) Geography of the South. **Two hours.**

Prerequisite: Geography 101.

The South, yesterday and today; the advancing South; the physical landscape; the cultural landscape; the major regions: the people of the South; the races and their distribution and problems; transportation facilities; agriculture, its development, its regions, its problems, and possibilities; power resources; mineral wealth, forest resources: manufacturing and industries; comparison of rural and urban communities of the South; the South's future.

Geography 305. (Formerly Geography 31.) Economic and Historical Geology. **Two hours.**

The origin of the earth; genesis of ore deposits; evolution of plants and animals; origin of mountains; history and growth of continents; the earth's interior; formation and recognition of common rocks and minerals; architecture of the earth; geologic time table; the geologic eras; the growth of knowledge of the earth: man's place in nature: geology in the service of man applied to industry and to the larger affairs of men; economic and geologic features of minerals.

Geography 372. (Formerly Geography 32.) Geography of Europe. **Three hours.**

Prerequisite: Geography 101.

The general geographic setting of Europe as a whole; the physiography, climate, economic and political geography of each of the major countries; European trade and commerce; the geographic advantages and handicaps of the various European countries that have resulted from the changes in boundaries that followed the World Wars.

Geography 373. (Formerly Geography 33.) Geography of Latin America. **Three hours.**

Prerequisite: Geography 101.

International importance of Latin America; growing interest of the United States in Latin America; historical geography of discovery, settlement and development; Caribbean resources; the Panama Canal; South America in world trade: population distribution; transportation facilities; climatic and physiographic regions: economic geography of the Pampas, the Amazon Basin, Central Mexican Plateau; the Llanos, Andean Highlands.

Geography 471. (Formerly Geography 40.) Geography of World Problems. **Three hours.**

Prerequisite: Six hours of geography.

Geography and the evolution of nations; the expansion of Europe; European influence in world affairs; economic resources; the British Empire and its many problems—India, Egypt, Ireland, South Africa; geography and problems of major nations of the Orient; Islamism; Russia, past and present; Europe in Africa; the problems of the Far East.

Geography 473. (Formerly Geography 41.) Geography of Asia. **Three hours.**

Prerequisite: Geography 101.

The structure of Asia: the physiography of Asia; the climates of Asia; the vegetation of Asia; the population of Asia; the exploration and exploitation of Asiatic countries by European nations: Asia's position in the world; the agricultural resources of Asia; summary of the economic resources of Asia; Turkey; Arab Asia; the Iranian Plateau; India, Burma; Ceylon; South-

eastern Asia; the East Indies; China; Japan; Asiatic Russia; growing interest in the United States in Asia; the geographic advantages and disadvantages of the continent.

Geography 474. (Formerly Geography 42.) Geography and Geology of Kentucky. **Two hours.**

The Kentucky country; geology; surface and drainage; weather and climate; native vegetation; native animals; native people; the coming of the white man; the soil and its conservation; agriculture; animal industries; mineral resources; manufacturing; transportation; location and growth of cities; Louisville and the cities of the Ohio Basin; other cities; the counties of Kentucky; cultural features of Kentucky—government, education; Kentucky of the Future.

Geography 475. (Formerly Geography 43.) Geography of Africa and Australia. **Three hours.**

Prerequisite: Geography 101.

Structure; physiography; climate; vegetation; population; exploration; exploitation; position in world affairs; agricultural resources; transportation facilities; climatic and physiographic regions; foreign trade and foreign interests, comparisons and contrasts with other continents; the geographic advantages and disadvantages; changes resulting from the World Wars and post-war conditions; present-day problems and their geographic background.

Geography 477. (Formerly Geography 44.) Conservation of Natural Resources. **Three hours.**

History of the conservation movement; the forest resources; soil depletion and restoration; the land resources; the fertilizer resources; water origin and supply; water power; irrigation and reclamation; navigation; the mineral resources; the mineral fuels, coal petroleum, natural gas; the metallic resources, iron, copper, lead, gold, zinc, aluminum, silver, uranium and radium; the human resources; agricultural losses.

GEOLOGY

Geology 201. (Formerly Geology 20.) Physical Geography and Geology. **Three hours.** Fee, $1.00.

Materials of the earth; weathering; work of wind; work of ground water; work of streams; work of glaciers; the ocean and its work; the structure of the earth; earthquakes; volcanoes and igneous intrusions; metamorphism; mountains, and plateaus: ore deposits; soils, their classification and origin; major physiographic features, their origin and influence on man.

UNIVERSITY BUILDING

GERMAN

LOWER DIVISION COURSES

German 101. (Formerly German 11.) Elementary German. **Three hours.**
Pronunciation; Grammar; conversation in German on material studied.

German 102. (Formerly German 12.) Elementary German. **Three hours.**
Prerequisite: German 101 or one unit of high school German.
Continuation of grammar study begun in German 101 and oral work based on reading material.

German 201. (Formerly German 21.) Intermediate German. **Three hours.**
Prerequisites: German 101 and 102 or two units of high school German.
Grammar review; short history of German literature; notable examples of the German short story.

German 202. (Formerly German 22.) Intermediate German. **Three hours.**
Prerequisite: German 201 or three units of high school German.
Grammar review; three German novels.

GOVERNMENT

LOWER DIVISION COURSES

Government 111. (Formerly Government 10.) American Government. **Three hours.**

National government; organization of the various departments with their functions and operations, political parties, ideals of correct government, relation of federal to state and local government.

Government 112. (Formerly Government 11.) American Government. **Three hours.**

State and local government; organization, operation, and problems of state, county and municipal government; relation of state and local to national government.

UPPER DIVISION COURSES

(Open to Junior, Senior and Graduate Students)

Government 351. (Formerly Government 30.) English Government. **Two hours.**

Prerequisite: Government 111.

The rise of governmental institutions of England and her influence among the nations: kingship; parliament: cabinet; ministry; privy council; Swiss system of government and her democracy.

Government 411. (Formerly Government 40.) International Diplomacy. **Three hours.**

Prerequisite: Government 111.

Leading negotiations and treaties among the nations; diplomatic and consular affairs in general.

Government 452. (Formerly Government 41.) Foreign Government. **Three hours.**

Prerequisite: Government 111.

Main features of the governments of Germany, France, Italy, and Russia.

Government 453. (Formerly Government 42.) Principles of Democracy. **Two hours.**

The theory of democracy; history of democracy; the attack on democracy; defense of democracy; leading democratic documents; democracy in the present crisis.

GRADUATE COURSES

Government 555. (Formerly Government 55.) Political Theory. **Three hours.**

Political Theory as propounded in Plato, Aristotle, Machiavelli, Grotius, Hobbes, Locke, Bodin, Bossuet, Voltaire, Montesquieu, Diderot, Turgot, Rousseau.

Government 556. (Formerly Government 56.) Political Theory. **Two hours.**

Political Theory since Rousseau, as propounded by Wilson, Laski and others.

HEALTH AND PHYSICAL EDUCATION

(Recommended curriculum for a major in Health and Physical Education with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Health 100	2	History 142	3
History 141	3	Library Science 166	1
Physical Education 110	½	Physical Education 110	½
Science 111	3	Science 112	3
Sociology 100 (Women)	1	Elective	6
Elective	4		
	16½		16½

Second Year

Biology 225	3	Biology 229	3
Education 211	3	Health 201	3
Health 202	1	Physical Education 110	½
Physical Education 110	½	Physical Education 225	2
Physical Education 220	2	Physical Education 261 (Men)	2
Physical Education 250 (Men) or Physical Education 251 (Women)	2	or Physical Education 362 (Men)	
Elective	5	Elective	6
	16½		16½

Third Year

English 211	3	Education 383	3
Physical Education 252 or 361 (Women)	2	English 212	3
Physical Education 300 (Women)	1	Health 362	2
Physical Education 367	1	Physical Education 345 (Women)	1
Physical Education 360 or 420 (Men)	2	Physical Education 366	1
Elective	9 or 10	Elective	6
	16		16

Fourth Year

Education 421b	2	Education 364	6
Physical Education 401	2	Education 463	10
Physical Education 468	2		
Elective	10		
	16		16

Students taking a major in Health and Physical Education should take a major in another department. It is not recommended that one majoring in Health and Physical Education be permitted to take two minors.

Recommended Curriculum for a Second Major in Health and Physical Education

A student with a first major in some other department may take the following courses for a second major in Health and Physical Education: Health 100, 201, 202, 365; Physical Education 110

(four semesters), 220, 225, 367, 366, 401, 468. Additional courses for men: Physical Education 250, 261 or 362, 360 or 420. Additional courses for women: 251, 300, 252 or 361, 345.

Recommended Curriculum for a Minor in Health and Physical Education

A student with a major and a minor in other departments may take the following courses for a minor in Health and Physical Education: Health 100, 202, 201; Physical Education 220, 225, 367, 366. Additional courses for men: 250, 360, 420. Additional courses for women: 251, 252, 300, 361.

HEALTH

LOWER DIVISION COURSES

Health 100. (Formerly Health 10.) Personal Hygiene. **Two hours.**

Correct living habits; desirable health practices; the place of health in modern times; scientific versus unscientific and irrational health practices.

Health 201. (Formerly Health 26.) Public Hygiene and Safety. **Three hours.**

Public hygiene and disease prevention; home, school, and community sanitation and public health.

Health 202. (Formerly Health 20.) First Aid to the Sick or Injured. **One hour.** Fee, $3.25.

Meeting emergencies in the schoolroom, on the playground, on the athletic field, and in everyday life. The Standard and Advanced Red Cross Certificates are awarded to students completing the course.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Health 303. (Formerly Health 21.) General Bacteriology. **Four hours.** Fee, $1.50.

Prerequisites: Chemistry 111 and 112.

Stains and staining techniques; sterilization; preparation of culture media; isolation and identification of bacteria; bacterial control; physical and chemical agents; immunity; disease control.

Health 362. (Formerly Health 32.) Correctives. **Two hours.**

Prerequisite: Biology 225. Fee, $2.50.

Basic, fundamental facts and principles upon which to build a sound program of corrective or reconstructive health and physical education. Exercises developed and used in this course will be based on anatomical and physiological principles, performed by the individual alone or with assistance, for the prevention or arrest, the cure or correction, of some definite functional or organic disability or deformity.

Health 365. (Formerly Health 36.) Materials and Methods for Teaching Health Education. **Two hours.**

General objectives of the health program; health set-ups and practices; selection, organization, and use of health materials for primary and intermediate grades; methods of teaching health.

HISTORY

(Recommended curriculum for a major in History with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
History 141	3	History 142	3
Physical Education 110	½	Library Science 166	1
Science 109 or 111	3	Physical Education 110	½
Sociology 100 (Women)	1	Science 110 or 112	3
Elective	6	Elective	6
	16½		16½

Second Year

English 211	3	English 212	3
History 202	3	Health 201	3
Modern Language	3	History 203	3
Physical Education 110	½	Modern Language	3
Physical Education 225	2	Physical Education 110	½
Elective	5	Elective	4
	16½		16½

Third Year

Education 211	3	History 344	3
History 340	3	History Elective	3
History Elective	3	Elective	10
Elective	7		
	16		16

Fourth Year

Education 383	3	Education 364	6
Elective	13	Education 463	10
	16		16

Recommended Curriculum for a Second Major in History

A student with a first major in some other department may take the following courses for a second major in History: History 141, 142, 202, 203, 340, 344, and 6 hours elective.

Recommended Curriculum for a Minor in History

A student with a major and a minor in other departments may take the following courses for a minor in History: History 141, 142, 202, 203, and 6 hours elective.

HISTORY

(Recommended curriculum for a major in History without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
History 141	3	History 142	3
Physical Education 110	½	Library Science 166	1
Science 109 or 111	3	Physical Education 110	½
Sociology 100 (Women)	1	Science 110 or 112	3
Elective	6	Elective	6
	16½		16½

Second Year

English 211	3	English 212	3
History 202	3	History 203	3
Modern Language	3	Modern Language	3
Physical Education 110	½	Physical Education 110	½
Elective	7	Elective	7
	16½		16½

Third Year

History 340	3	History 344	3
Elective	13	Elective	13
	16		16

Fourth Year

History Elective	3	History Elective	3
Elective	13	Elective	13
	16		16

RECOMMENDED CURRICULUM FOR A MAJOR IN THE AREA OF SOCIAL SCIENCE

(Recommended curriculum for a major in the area of Social Science with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
History 141	3	Geography 101	3
Physical Education 110	½	History 142	3
Science 109 or 111	3	Library Science 166	1
Sociology 100 (Women)	1	Physical Education 110	½
Elective	6	Science 110 or 112	3
		Elective	3
	16½		16½

Second Year

English 211	3	English 212	3
Government 111	3	Government 112	3
History 202	3	Health 201	3
Physical Education 225	2	History 203	3
Physical Education 110	½	Physical Education 110	½
Elective	5	Elective	4
	16½		16½

Third Year

Commerce 230	3	Commerce 231	3
Education 211	3	History 344	3
History 340	3	Geography 471	3
Sociology 331	3	Sociology 332	3
Elective	4	Elective	4
	16		16

Fourth Year

Education 383	3	Education 364	6
Soc. Sci. Elective	6	Education 463	10
Elective	7		
	16		16

RECOMMENDED CURRICULUM FOR A MAJOR IN THE AREA OF SOCIAL SCIENCE

(Recommended curriculum for a major in the area of Social Science without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
History 141	3	Geography 101	3
Physical Education 110	½	History 142	3
Science 109 or 111	3	Library Science 166	1
Sociology 100 (Women)	1	Physical Education 110	½
Elective	6	Science 110 or 112	3
		Elective	3
	16½		16½

Second Year

English 211	3	English 212	3
Government 111	3	Government 112	3
History 202	3	History 203	3
Modern Language or English 131	3	Modern Language or English 231	3
Physical Education 110	½	Physical Education 110	½
Elective	4	Elective	4
	16½		16½

Third Year

Commerce 230	3	Commerce 231	3
History 340	3	Geography 471	3
Elective	10	History 344	3
		Elective	7
	16		16

Fourth Year

Sociology 331	3	Sociology 332	3
Soc. Sci. Elective	3	Soc. Sci. Elective	3
Elective	10	Elective	10
	16		16

HISTORY

LOWER DIVISION COURSES

History 141. (Formerly History 10.) History of Western Civilization. **Three hours.**

Rise of ancient governments; the city state of Greece; Grecian art and architecture; the rise of imperial government in Rome; the influence of the Roman legal system; the rise of the Church; medieval institutional and cultural developments.

History 142. (Formerly History 11.) History of Western Civilization. **Three hours.**

Rise of modern states; the Renaissance and Reformation; dynastic and international wars; the rise of labor-capital disputes; the rise and development of the socialist party; the World Wars and their aftermath.

History 202. (Formerly History 21.) American History 1492 to 1865. **Three hours.**

Discovery, exploration and conquest by nations; colonization; the colonial wars; alienation of the colonies from England and eventual revolution; establishment of government and rise of a powerful nation; the War of 1812; the new nationalism; westward movement; Jacksonian democracy; the slavery controversy; Civil war and reconstruction.

History 203. (Formerly History 22.) American History 1865 to the present. **Three hours.**

The rise of Industrialism; problems of the American farmer; social and cultural advance; money and the tariff; the last American frontier; America as a world power; the World Wars; politics since 1876; recent social developments.

History 205. (Formerly History 25.) Local History Appreciation. **Two hours.**

Prerequisite: One course in American History.

Local history, its significance in state and national development; local records, county, city, school, church, business, family; county and other local histories; biographies and genealogies; diaries, journals, letters, etc.; local leaders; sources for writing local history; local historical surveys; excursions to historic buildings, ruins, museums, cemeteries.

History 209. (Formerly History 29.) A Survey of the Global War. **Two hours.**

Social, economic, and political background of World War II; problems brought about by world conflict; the importance of a lasting peace.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

History 340. (Formerly History 30 and 241.) European History from 1300 to 1815. **Three hours.**

Renaissance; Reformation; rise of the national state and royal absolutism; decline of manorialism; rise of capitalism and the mercantile system; the British revolutions of the seventeenth century; international rivalries, wars of dynastic and territorial aggrandizement; the age of reason and enlightened despotism; the French Revolution and Napoleon.

History 341. (Formerly History 35.) English History to the Stuarts. **Three hours.**

The coming of the Anglo-Saxon; advance toward nationality; the Norman invasion; English feudalism; the Hundred Years' War; legal and political development; the Wars of the Roses and the fall of feudalism and rise of Tudor monarchy.

The Divine Right of James I and Charles I; religious and financial struggles of the time; parliamentary resistance to the first two Stuarts; the "Roundhead Rebellion"; Charles II; James II and the English Revolution.

History 342. (Formerly History 37.) English History from 1714 to the Present. **Three hours.**

Prerequisite: History 341.

The Hanoverian dynasty; the struggle for empire; development of British Imperialism; parliamentary reforms of the nineteenth century; influence of political parties; England's place in the "Parliament of Men."

History 344. (Formerly History 31.) European History from 1815 to 1914. **Three hours.**

Intellectual and religious developments; restoration and reaction following the Congress of Vienna; revolutionary and reform movements; nationalism; imperialism; political, social, and economic developments in the major countries; background of World War I.

History 347. (Formerly History 40.) Recent and Current World History. **Two hours.**

The First World War and its consequences; the League of Nations and the International Court of Justice; causes of the Second World War; present conditions.

History 348. (Formerly History 38.) Inter-Racial Relations. **Three hours.**

Local, national, and international problems brought about by inter-racial relations.

History 349. (Formerly History 34.) Survey of the Far East. **Three hours.**

This course centers mainly about China and Japan, with the European Nations and America brought in, when their policies lead into the area. Some attention is given also to India, Australia and to Islands of the Pacific.

History 360. (Formerly History 39.) Teaching the Social Studies. **Two hours.**

Aims and objectives; national committee reports; social studies literature; methods of instruction; practical tools of instruction; integration; grade placement; community resources; evaluation.

History 405. (Formerly History 44.) History of the American West. **Three hours.**

Prerequisites: History 202 and 203.

Significance of the West in American History; advancement of the frontier; influence of the West on politics; Indian problems; the West of the fur trader; the rancher, the miner, and the farmer; communication and transportation; the end of the frontier.

History 406. (Formerly History 45a and 45b.) History of the American South. **Three hours.**

Settlement; peoples; religions; government; education; social and economic conditions; relations with the North and with foreign nations consequent to slavery; the Civil War; Reconstruction, resumption, and progress in all lines.

History 407. (Formerly History 47.) Recent and Current American History. **Two hours.**

The onrush of "Big Business"; commerce; expansion; tariff; foreign relations; imperialism; World Wars and current politics.

History 440. (Formerly History 41.) Modern Germany from 1789 to the Present. **Two hours.**

Political, social, economic, and intellectual developments; effects of the French Revolution and the Napoleonic Wars; revolutionary movements after the Congress of Vienna; formation of the German Empire; domestic and international developments from 1870 to 1914; World War I; the German Republic and the Hitler Revolution; World War II.

History 443. (Formerly History 42.) The French Revolution and Napoleon. **Two hours.**

A survey of the Old Regime with emphasis on the causes of the Revolution; a detailed study of the Revolution and the Napoleonic Empire.

History 446. (Formerly History 48.) Latin American History. **Three hours.**

A survey of the history of the nations to the south of us, covering the period from Columbus to the present; Latin American culture, economics, politics, and world interest, with special emphasis on our relations with these countries.

History 447. (Formerly History 43.) History of France Since 1815. **Two hours.**

The Industrial Revolution and its impact on social and political life; religious, intellectual, and cultural trends; reactionary policies of the Restoration period: the Revolutions of 1830 and 1848; domestic affairs under the Second French Empire and the Third French Republic; French nationalism and imperialism in relation to Franco-German rivalry; factors in the decline of France in recent years.

History 448a. (Formerly History 55a.) Topics in European History. **Two hours.**

(Open only to Junior and Senior students majoring and Graduate students minoring in History or Social Science.)

Prerequisites: History 340 and 344.

Designed to introduce students to the elements of research in the field of modern European history. Selection of topics for study will be made on the basis of the previous training and special interests of the students participating. A student may take either 448a or 448b and obtain two hours of credit without taking the other, or he may take both 448a and 448b and obtain a total of four hours of credit.

History 448b. (Formerly History 55b.) Topics in European History. **Two hours.**

Prerequisites and description same as for History 448a.

History 449. (Formerly History 49.) History as a Social Science. **Two hours.**

The scientific approach to social problems and their historical interpretation; an analysis of the economic, social, intellectual, and political backgrounds of contemporary civilization; reading and reports.

History 461. (Formerly History 46.) Kentucky History. **Three hours.**

General, social, economic, and political history of Kentucky; her influence in the development of American democracy; her periods of leadership in the nation; her educational system; Kentucky's great men and women; historical sources of Kentucky.

GRADUATE COURSES

History 551. (Formerly History 51.) American Colonial History, 1492-1776. **Three hours.**

Purpose: To show the foundations of American institutions, political, social, and economic.

History 552. (Formerly History 52.) The American Civil War and Reconstruction. **Three hours.**

To review the political and military administrations of the United States and the Confederate States during the war, and to show the political, social, and economic effects on the United States as a whole.

History 555. Intellectual History from Medieval Times to the Era of the Industrial Revolution. **Two hours.**

History of the basic ideas in Western Civilization from Medieval times through the era of the Enlightenment. The basic textual material for the course is provided by John Herman Randall's **The Making of the Modern Mind** and Volume I of the source book, **Introduction to Contemporary Civilization in the West**, prepared by the Contemporary Civilization staff of Columbia College, Columbia University.

History 556. Intellectual History since the Era of the Enlightenment. **Two hours.**

History of the basic ideas in Western Civilization from the era of the Enlightenment to the present. The basic textual material for the course is provided by John Herman Randall's **The Making of the Modern Mind** and Volume II of the source book, **Introduction to Contemporary Civilization,** prepared by the Contemporary Civilization staff of Columbia College, Columbia University.

HOME ECONOMICS

(Recommended curriculum for a major in Vocational Home Economics with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Art 117	3	Art 217	2
English 101	3	English 102	3
Home Economics 101	2	Home Economics 231	3
Home Economics 204	3	Home Economics 203	3
Home Economics 100	3	Home Economics Elective	2
Library Science 166	1	Physical Education 110	½
Physical Education 110	½	*Elective	3
Sociology 100 (Women)	1		
	16½		16½

Second Year

Chemistry 111	5	Biology 219 or Sociology 331	3
Commerce 260 or 230	3	Chemistry 112	5
Education 211	3	Home Economics 215	3
Home Economics 206	3	Home Economics 222	3
Home Economics 250	3	Physical Education 110	½
Physical Education 110	½	Physical Education 225	2
	17½		16½

Third Year

Chemistry 220	4	Biology 219 or Sociology 331	3
English 131 or 212	3	Education 304	3
Health 303	4	Home Economics 301	2
Home Economics 303	3	Home Economics 306	3
Home Economics 309	3	Home Economics 330	2
		Home Economics 402	3
	17		16

Fourth Year

Home Economics 305	3	Education 364	4
Home Economics 403	4	Education 463	10
Home Economics Elective (Foods)	3	Education 466	3
*Elective	6		
	16		17

* The student is expected to take 6 hours from the following fields: History, Political Science, Language, Mathematics, or Music.

HOME ECONOMICS

LOWER DIVISION COURSES

Home Economics 100. Personal and Family Problems. **Three hours.**

The personal responsibility of the college student to himself and his family. Specialists will discuss such topics as: Personality, grooming, place of each person in the home and community.

Home Economics 101. (Formerly Home Economics 10.) Textiles. **Two hours.**

Physical and chemical characteristics of the various textile fibers; the weaves, finishes, durability and care of fabrics; application of scientific information to the purchase and use of fabrics.

Home Economics 102. (Formerly Home Economics 11.) Source, Selection and Cost of Foods. **Two hours.**

Problems involved in the marketing of foods and in the purchase of foods; the foods available for home use; the brands of foods; the amounts of foods for family groups.

Home Economics 155. (Formerly Home Economics 12.) Costume Design. **Two hours.**

Principles of design as related to the costume; study of line, color, and texture in fabrics as related to different types of individuals.

Home Economics 203. (Formerly Home Economics 20.) Garment Making. **Three hours.**

Fundamentals of garment construction by means of planning, selecting, and purchasing of fabrics; commercial patterns; construction of simple garments; hand and machine sewing.

Home Economics 204. (Formerly Home Economics 21a.) Food Preparation. **Three hours.**

Composition of foods; the nutritive value of foods; diet in relation to health; the fundamental principles involved in the preparation of foods. Fee, $2.25.

Home Economics 205. (Formerly Home Economics 22.) Meal Planning, Preparation, and Serving. **Three hours.**

Prerequisite: Home Economics 204 or its equivalent.

The equipment and arrangement of different types of kitchens; the preparation of balanced meals; the cost of meals; table service; etiquette; hospitality; special entertainments. Fee, $7.50.

Home Economics 206. (Formerly Home Economics 23.) Dressmaking. **Three hours.**

Prerequisite: Home Economics 203 or its equivalent.

Construction of four dresses; one wool, one silk or rayon, one made-over problem; fittings and finishes.

Home Economics 215. (Formerly Home Economics 21b.) Food Preparation. **Three hours.**

Emphasis upon different methods of preparing the same food; planning, preparing, and serving "Three Meals A Day." Fee, $2.25.

Home Economics 222. (Formerly Home Economics 24.) Interior Decoration. **Three hours.**

Prerequisite: Art 117.

Decoration and furnishing for the interior of the house considering the style of architecture, cost, durability and use of the house; laboratory work on slip covers, curtains, and refinishing furniture.

Home Economics 231. (Formerly Health 22 and 231.) Home Nursing. **Three hours.**

First aid and care of sickness in the home.

Home Economics 250. (Formerly Home Economics 25.) The House. **Three hours.**

Architecture; house plans; landscaping; materials suitable for building a home; financing a home.

Home Economics 260. (Formerly Home Economics 26.) Food Preservation. **Two hours.**

Planning a food preservation budget; laboratory experience in drying, salting, pickling, freezing, canning, making preserves and jellies; experience with canning in community canneries.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Home Economics 301. (Formerly Home Economics 30.) Household Equipment. **Two hours.**

Standards for judging household equipment; advantages of labor-saving devices; care of equipment.

Home Economics 302. (Formerly Home Economics 31.) Advanced Cookery. **Three hours.**

Prerequisite: Home Economics 214.

Scientific principles of cookery through experimentation and variation of proportions in recipes; skills and techniques of cookery. Fee, $4.50.

Home Economics 303. (Formerly Home Economics 32.) The Family. **Three hours.**

Biological, psychological, social, and economic aspects of family organization.

Home Economics 305. (Formerly Home Economics 34.) Tailoring. **Three hours.**

Prerequisites: Home Economics 203 and 206.

Experience in handling of woolen fabrics; principles involved in tailoring a coat and a suit.

Home Economics 306. (Formerly Home Economics 35.) Advanced Nutrition. **Three hours.**

Prerequisites: Chemistry 220 and Biology 219.

Food nutrients and functions in the body. Construction of an adequate diet for persons under varying economic and social conditions.

Home Economics 307. Marriage and Family Relations. **Three hours.**

The interplay of personalities within the family group; problems faced by young people in marriages and family living.

Home Economics 308. (Formerly Home Economics 37.) Advanced Textiles. **Two hours.**

Prerequisite: Home Economics 101.

The advanced study of textile fibers; chemical test.

Home Economics 309. (Formerly Home Economics 38.) Consumer Problems. **Three hours.**

Consumer problems today; guides to buying and standardization of household goods.

Home Economics 310. Nutrition for the Elementary Teacher. **Two hours.**

The fundamentals of nutrition. The importance of good nutrition to the child. Ways to interest the child in good nutrition. Results of good nutrition.

Home Economics 323. (Formerly Industrial Arts 32.) Weaving and Upholstering. **Two hours.**

Prerequisite: Industrial Arts 100 or 141.

Upholstering plain surfaces and frame structures; upholstering with springs; renovation; caning; split and fiber weaving; materials; tools and tool processes. Fee, $1.50.

Home Economics 330. (Formerly Home Economics 33.) Introduction to Home Management. **Two hours.**

Prerequisites: Home Economics 204 and 215.

Economic and scientific factors which influence home living; time, labor, finance, sanitation, and household servant problems.

Home Economics 401. (Formerly Home Economics 40.) Dietetics. **Three hours.**

Prerequisites: Home Economics 204, 215, 306, Chemistry 220, Biology 219.

Nutritive value of common foods; essentials of adequate diet; human nutrition applied to feeding individuals in health and disease.

Home Economics 402. (Formerly Home Economics 41.) Child Development. **Three hours.**

Prerequisite: Education 211.

Care necessary for physical, mental, emotional, and social development of the child from infancy through adolescence; observation of children.

Home Economics 403. (Formerly Home Economics 43.) Home Management. **Four hours.**

Prerequisite: Home Economics 330.

Reservations for appointment to live in the Home Management House should be made several weeks prior to the beginning of the quarter.

Improvement of skills in the management of time, money, and energy; meal planning; food buying; preparation and serving of meals; cleaning; laundry. Family relationships, etiquette, and hospitality are emphasized.

Home Economics 405. (Formerly Home Economics 44.) Institutional Management. **Six hours.**

Organization, management, and equipment of institutions such as tea rooms, cafeteria, and hotel dining rooms; trips to visit large eating places, hotels, and school cafeterias. College cafeteria used as a laboratory.

Home Economics 455. (Formerly Home Economics 42.) Advanced Costume and Design. **Three hours.**

Prerequisites: Home Economics 155 and Art 117.

The application of art principles in color and line, in designing and construction of garments.

Home Economics 456. Special Problems in Home Economics. **One hour.**

The student chooses a problem and works under the supervision of the instructor in the field of the problem.

INDUSTRIAL ARTS

(Recommended curriculum for a major in the area of Industrial Arts with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
History 202	3	History 203	3
Industrial Arts 100	3	Industrial Arts 141	3
Industrial Arts 191	3	Industrial Arts 180	3
Library Science 166	1	Physical Education 110	½
Physical Education 110	½	Science 110	3
Science 109	3		
	16½		15½

Second Year

Art 117	3	Education 211	3
English 211	3	English 212	3
Health 202	2	Health 201	3
Industrial Arts 242	3	Industrial Arts 233	2
Industrial Arts 292	3	Industrial Arts 382	3
Mathematics 107	3	Mathematics 113	3
Physical Education 110	½	Physical Education 110	½
	17½		17½

Third Year

Art 260	3	Education 383	3
Industrial Arts 343	3	Industrial Arts 466	2
Industrial Arts 361	2	Industrial Arts 487	3
Industrial Arts 394	3	Industrial Arts Elective	2
Physics 131 or Chemistry 111	5	Physical Education 225	2
		Elective	5
	16		17

Fourth Year

Art Elective	3	Education 364	6
Industrial Arts Elective	10	Education 463	10
Elective	3		
	16		16

Recommended Curriculum for a First Major in Industrial Arts

A student may take the following courses for a first major in Industrial Arts and other departmental courses for a second major or minors and to meet general requirements for a teaching certificate: Industrial Arts 100, 191, 141, 180, 233, 242, 292, 382, 361, 466, and 3 hours elective.

Recommended Curriculum for a Second Major in Industrial Arts

A student with a first major in some other department may take the following courses for a second major in Industrial Arts: Industrial Arts 100, 191, 141, 180, 242, 361, 382, and 4 hours elective.

Recommended Curriculum for a Minor in Industrial Arts

A student with a major and a minor in other departments may take the following courses for a minor in Industrial Arts: Industrial Arts 100, 191, 141, 180, and 6 hours elective.

INDUSTRIAL ARTS

LOWER DIVISION COURSES

Industrial Arts 100. (Formerly Industrial Arts 10.) General Shop. **Three hours.**

Introductory course involving basic units in drawing, woodworking, sheet metal, art metal, ornamental iron, and electricity; projects and practical shop problems in each activity. Fee, $1.50.

Industrial Arts 141. (Formerly Industrial Arts 11.) Elementary Cabinet Construction. **Three hours.**

Basic woodworking course including instruction in common hand tools, elementary wood turning, finishing, characteristics of common cabinet woods, and processing of lumber for industrial use. Fee, $1.50.

Industrial Arts 180. (Formerly Industrial Arts 26 and 280.) General Metal Work. **Three hours.**

Exploratory experiences in manipulative and informational units in bench metal, ornamental iron, sheet metal, art metal, machine tool processes, and elementary welding and foundry practice. Fee, $1.50.

Industrial Arts 191. (Formerly Industrial Arts 13.) Elementary Mechanical Drawing. **Three hours.**

A beginning course stressing lettering, orthographic projection, pictorial representation, tracing, and blueprinting. Fee, $1.50.

Industrial Arts 222. (Formerly Industrial Arts 16.) Primary Handicraft. **Two hours.**

Typical forms of industrial arts applicable to conditions in the elementary school. Fee, $1.50.

Industrial Arts 233. (Formerly Industrial Arts 15.) Elementary Industrial Arts Design. **Two hours.**

Prerequisite: Industrial Arts 191.

Basic principles of design; application of design to products of industrial craftsmanship; period styles of furniture. Fee, $1.50.

Industrial Arts 235. (Formerly Industrial Arts 22.) Advanced Industrial Arts Design. **Two hours.**

Prerequisite: Industrial Arts 233.

Application of the fundamentals of design through production of plans, furniture rods, and designs representative of the various industrial arts activities. Fee, $1.50.

Industrial Arts 240. (Formerly Industrial Arts 24a.) Pattern Making. **Two hours.**

Use of woodworking tools and machines common to pattern making; construction of patterns involving principles of shrinkage, draft, finish, warp, cores; the use of patterns in the foundry. Fee, $1.50.

Industrial Arts 242. (Formerly Industrial Arts 21.) Intermediate Cabinet Construction. **Three hours.**

Prerequisite: Industrial Arts 141.

Advanced hand woodworking units; operation of common woodworking machines; care and sharpening of tools; related information; construction and finishing of furniture projects. Fee, $1.50.

Industrial Arts 249. (Formerly Industrial Arts 14.) Wood Finishing and Decoration. **Two hours.**

Prerequisite: Industrial Arts 100 or 141.

Preparation of surface for finishing, staining, sealing, and filling; use of varnish, shellac, and lacquer; finishing abrasives and rubbing; refinishing of furniture. Fee, $1.50.

Industrial Arts 282. (Formerly Industrial Arts 24b.) Foundry. **Two hours.**

Study of molding materials, tools, and equipment; molding operations; making and setting cores; metals; melting and pouring. Fee, $1.50.

Industrial Arts 283. (Formerly Industrial Arts 27.) Arc and Oxyacetylene Welding. **Two hours.**

Manipulative processes and related information basic to successful welding techniques. Fee, $1.50.

Industrial Arts 292. (Formerly Industrial Arts 20.) Elementary Machine Drawing. **Three hours.**

Prerequisite: Industrial Arts 191.

The making of detail and assembly drawings: forms of bolts, nuts, thread, and conventions; problems from pictorial drawings with dimensions; tabular data; sketches from actual parts. Fee, $1.50.

Industrial Arts 293. (Formerly Industrial Arts 23.) Advanced Mechanical Drawing. **Three hours.**

Prerequisite: Industrial Arts 233.

Special emphasis on technique; drawings correlated with shopwork. Fee, $1.50.

Industrial Arts 294. (Formerly Industrial Arts 28.) House Planning. **Two hours.**

Planning a residence with floor plans, elevations, details, and specifications; orders of architecture; common styles of homes; building materials. Fee, $1.50.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Industrial Arts 303. (Formerly Industrial Arts 30.) Shop Planning and Equipment. **Two hours.**

Types of industrial school shops; shop planning; machine and tool specifications; design of shop furniture; selection of supplies.

Industrial Arts 323. (Formerly Industrial Arts 32.) Weaving and Upholstering. **Two hours.**

Prerequisite: Industrial Arts 100 or 141.

Upholstering plain surfaces and frame structures; upholstering with

springs; renovation; caning; split and fiber weaving; materials; tools, and tool processes. Fee, $1.50.

Industrial Arts 326. (Formerly Industrial Arts 29.) Elementary Crafts. **Three hours.**

Instruction and practice in jewelry making, wood carving, and the working of plastics. Fee, $1.50.

Industrial Arts 343. (Formerly Industrial Arts 31a.) Advanced Cabinet Construction I. **Three hours.**

Prerequisite: Industrial Arts 242.

Advanced projects involving skill in the use of machines and hand tools; additional practice in woodworking, reeding, fluting, carving, inlaying, veneering, dovetailing; study of industrial furniture processes. Fee, $1.50.

Industrial Arts 344. (Formerly Industrial Arts 33.) Wood Turning. **Three hours.**

Prerequisite: Industrial Arts 242.

Common wood turning problems; sharpening of tools; operations in spindle turning, faceplate turning, and chuck turning; finishing and polishing. Fee, $1.50.

Industrial Arts 345. (Formerly Industrial Arts 31b.) Advanced Cabinet Construction II. **Three hours.**

Continuation of Industrial Arts 343 with increased emphasis on craftsmanship and the development of a high degree of skill in furniture construction. Fee, $1.50.

Industrial Arts 361. (Formerly Industrial Arts 36.) Organization of Subject Matter in Industrial Arts. **Two hours.**

Organization of subject matter for teaching industrial arts in the junior and senior high schools; objectives of industrial arts; analysis of subject matter; organization of jobs; lesson plans; teaching devices.

Industrial Arts 382. (Formerly Industrial Arts 34.) Machine Shop Practice I. **Three hours.**

Prerequisite: Industrial Arts 180.

Projects made involving basic operations performed on lathe, drill press, shaper, bench grinder, power contour saws, and advanced bench work; blueprint reading and related shop mathematics. Fee, $1.50.

Industrial Arts 383. (Formerly Industrial Arts 35.) Art Metal Work. **Three hours.**

Prerequisite: Industrial Arts 180.

Artisan techniques of designing, laying out, raising, planishing, chasing, etching, spinning, soldering, engraving, and finishing products made on nonferrous metals. Fee, $1.50.

Industrial Arts 385. (Formerly Industrial Arts 25.) Sheet Metal Work. **Three hours.**

Prerequisite: Industrial Arts 180.

Care and use of the common sheet metal tools and machines; making of layouts; templates; projects involving soldering, seaming, punching, riveting, forming, and spot welding. Fee, $1.50.

Industrial Arts 394. (Formerly Industrial Arts 37.) Elementary Architectural Drawing. **Three hours.**

Prerequisite: Industrial Arts 191.

Lettering; elements of architecture; mouldings; modeling; shades and shadows; wash work; rendering; elementary design. Fee, $1.50.

Industrial Arts 395. (Formerly Industrial Arts 39.) Carpentry. **Six hours.**

Problems in small home construction; form building; framing; masonry; electrical wiring; interior finishing; painting; practice in actual construction.

Industrial Arts 401. (Formerly Industrial Arts 40.) Problems in Industrial Arts. **Two or Four hours.**

A course for seniors and graduate students in which problems of special interest and value to the student will be studied.

Industrial Arts 444. (Formerly Industrial Arts 41.) Machine Woodworking. **Two hours.**

Prerequisite: Industrial Arts 242.

Special machine operations; repairing and servicing of power woodworking machinery. Fee, $1.50.

Industrial Arts 464. (Formerly Industrial Arts 42.) History of Industrial Education. **Two hours.**

The history of industrial education from its early beginning to the present; the contribution of leaders and movements to the development of industrial arts and vocational education; legislation for vocational education and the State Plan.

Industrial Arts 466. (Formerly Industrial Arts 46.) Teaching of Industrial Arts. **Two hours.**

Problems of teaching industrial arts; methods of presentation; instructional aids; shop management; demonstration lessons; grading student achievement.

Industrial Arts 487. (Formerly Industrial Arts 44.) Machine Shop Practice II. **Three hours.**

Prerequisite: Industrial Arts 382.

Continuation of Industrial Arts 382 with increased emphasis on machine tool operations; gear cutting, tool and cutter grinding; problems in tool making; source, characteristics, and use of the common metals. Fee, $1.50.

Industrial Arts 488. (Formerly Industrial Arts 45.) Machine Shop Practice III. **Three hours.**

Prerequisite: Industrial Arts 487.

Practice in advanced machine processes and tool making; heat treating of different metals; organization of project material; related information. Fee, $1.50.

Industrial Arts 496. (Formerly Industrial Arts 47.) Advanced Architectural Drawing. **Three hours.**

Prerequisite: Industrial Arts 394.

Student, with instructor's approval, will select a major project and make suitable esquisse and rendu of same. Fee, $1.50.

LATIN

Major—A minimum of 24 semester hours to be selected.

Minor—A minimum of 18 semester hours to be selected.

LOWER DIVISION COURSES

Latin 101. (Formerly Latin 115 and 10.) Elementary Latin. **Three hours.**
Pronunciation; declension of nouns, adjectives, and pronouns; indicatives; infinitives; simple uses of subjunctive of verbs; acquisition of the fundamental principles of the language; ability to read simple Latin prose dealing with Roman home life, mythology, and Roman history.

Latin 102. (Formerly Latin 116 and 11.) Elementary Latin. **Three hours.**
Prerequisite: One unit of high school Latin or Latin 101.
Caesar and a wide range of authors of equal difficulty; vocabulary, inflection, syntax, and their application to English; collateral reading on Roman history and society; training in the understanding of Latin in the Latin order.

Latin 201. (Formerly Latin 12.) Selections from Cicero and Ovid. **Three hours.**
Prerequisite: Two units of high school Latin or Latin 102.
Selections from the works of Cicero, Ovid, Pliny, and others; continued emphasis on mastery of vocabulary and syntax; emphasis on the relation of Latin to English; comparison of the government of the Roman Republic to that of democracies of the present day.

Latin 202. (Formerly Latin 205 and 13.) Selection from Vergil's Aeneid. **Three hours.**
Prerequisite: Two or three units of high school Latin or Latin 201.
Selections from Aeneid of Vergil; study of the Augustan age; study of metrical form and structure of the poem; continued emphasis on Latin inflections and constructions.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Latin 301. (Formerly Latin 15.) Selections from Livy. **Three hours.**
Prerequisite: Three units of high school Latin or the equivalent.
Survey of Roman history from the foundation of Rome to the close of the second Punic War; assigned readings from such historians as Mommsen, Heitland, and others: comparative study of Rome and Carthage; critical study of Livy's style.

Latin 302. (Formerly Latin 16.) Selections from Horace. **Three hours.**
Prerequisite: Three units of high school Latin or the equivalent.
Selected odes, epodes, and satires from Horace; study of the Augustan age from both a literary and political point of view; study of Horace's philosophy; various meters employed by Horace.

Latin 303. (Formerly Latin 22.) The Writing of Latin Prose. **Three hours.**
Prerequisite: Latin 301 or the equivalent.
Selections from the text, "Arnold's Latin Prose"; review of syntax, sight reading.

Latin 304. (Formerly Latin 23.) The Latin Dramatists. **Three hours.**
Prerequisite: Latin 301 or the equivalent.
Dramas of Plautus, Terrence, and Seneca; two plays of Plautus for intensive study; rapid reading of other representative plays.

Latin 401. (Formerly Latin 41.) Latin Prose of the Silver Age. **Three hours.**
Prerequisite: Latin 302 or the equivalent.
Letters of Pliny the Younger; selections from the writings of Tacitus.

Latin 402. (Formerly Latin 32.) Satire and Epigram. **Three hours.**
Selected satires of Juvenal; selected epigrams of Martial; development of satire in Latin literature with assignments from Horace; satire in English; epigram as a literary expression.

Latin 403. (Formerly Latin 31.) Latin Literature of the Early Empire. **Three hours.**
Prerequisite: Latin 302 or the equivalent.
The Oxford University Press text—selections compiled by A. C. B. Brown. The selections form a connected and contemporaneous discussion of politics, education, literature, philosophy, social types, and town and country life.

Latin 404. (Formerly Latin 30.) Literature of the Late Republic. **Three hours.**
Prerequisite: Latin 302 or the equivalent.
Selections from the works of Caesar, Sallust, Nepos, and Cicero with emphasis on Ciceronian prose as a basis of much of the thinking and writing since his day; selections from works of poets of this age with emphasis on the works of Catullus and Lucretius.

Latin 405. (Formerly Latin 42.) Roman Private Life. **Three hours.**
Lectures, discussions, and readings on Roman family, home, marriage, education, clothing, food, amusements, travel, religion, town and country life.

LIBRARY SCIENCE

LOWER DIVISION COURSES

Library Science 166. (Formerly Library Science 10.) Library Orientation. **One hour.**

Discussion of the card catalog; library plans; principles of classification; mechanical make-up of the books; reference books; indexes; bibliographies; printed aids in book sections.

MATHEMATICS

(Recommended curriculum for a major in Mathematics with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
History 141	3	History 142	3
Library Science 166	1	Mathematics 108	2
Mathematics 107	3	Mathematics 113	3
Physical Education 110	½	Physical Education 110	½
Sociology 100 (Women)	1	Elective	5
Elective	5		
	16½		16½

Second Year

English 211	3	English 212	3
Mathematics 232	3	Mathematics 251	5
Physical Education 110	½	Physical Education 110	½
Physical Education 225	2	Physics 202	5
Physics 201	5	Elective	3
Elective	3		
	16½		16½

Third Year

Education 211	3	Education 383	3
Health 201	3	Mathematics 467	3
Mathematics 352	3	*Mathematics Elective	3
Elective	7	Elective	7
	16		16

Fourth Year

*Mathematics Elective	3	Education 364	6
Elective	13	Education 463	10
	16		16

Recommended Curriculum for a Second Major in Mathematics

A student with a first major in some other department may take the following courses for a second major in Mathematics: Mathematics 107, 108, 113, 232, 251, 352, and two courses from the following: Mathematics 321, 334, 453, 454, 455, 467.

Recommended Curriculum for a Minor in Mathematics

A student with a major and a minor in other departments may take the following courses for a minor in Mathematics: Mathematics 107, 108, 113, 232, 251, 352.

* Electives to be taken from Mathematics 321, 334, 407, 453, 454, 455.

MATHEMATICS

(Recommended curriculum for a major in Mathematics without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
History 141	3	History 142	3
Library Science 166	1	Mathematics 108	2
Mathematics 107	3	Mathematics 113	3
Physical Education 110	½	Physical Education 110	½
Sociology 100 (Women)	1	Elective	5
Elective	5		
	16½		16½

Second Year

English 211	3	English 212	3
Mathematics 232	3	Mathematics 251	5
Physical Education 110	½	Physical Education 110	½
Physics 201	5	Physics 202	5
Elective	5	Elective	3
	16½		16½

Third Year

English Elective	3	*Mathematics Elective	3
Mathematics 352	3	Elective	13
Elective	10		
	16		16

Fourth Year

*Mathematics Elective	3	*Mathematics Elective	3
Elective	13	Elective	13
	16		16

* Electives to be taken from Mathematics 321, 334, 407, 453, 454, 455.

MATHEMATICS AND ASTRONOMY

LOWER DIVISION COURSES

Mathematics 101. Arithmetic. **One hour.**

This course is only for students showing deficiencies in arithmetic as determined by a preliminary test.

The decimal system of notation; the fundamental operations applied to whole numbers and common fractions; decimal fractions; units of measurement; ratio and proportion; percents; simplified computation.

Mathematics 102. Intermediate Algebra. **One hour.**

This course is only for students showing deficiencies in algebra as determined by a preliminary test, that would indicate their inability to carry on the work in Mathematics 107.

Signed numbers; fundamental operations; equations and stated problems; factoring; fractions; exponents, roots and radicals; graphical methods; quadratic equations.

Mathematics 107. (Formerly Mathematics 10.) College Algebra I. **Three hours.**

Review of high school algebra; exponents and radicals; functions and their graphs; equations and their solutions; systems of linear and quadratic equations; ratio and proportion; progressions.

Mathematics 108. (Formerly Mathematics 11.) College Algebra II. **Two hours.**

Prerequisite: Mathematics 107.

Mathematical induction; binomial theorem; theory of equations; permutations; combinations; probability; determinants; partial fractions.

Mathematics 113. (Formerly Mathematics 12.) Trigonometry. **Three hours.**

Prerequisite: Mathematics 107.

The trigonometric functions; logarithms; right triangle; radian measure; properties of the trigonometric functions; functions of two angles; the oblique triangle; the inverse trigonometric functions.

Mathematics 120. Mathematics in Agriculture. **Three hours.**

This course is open only to Agricultural Students.

Mathematical operations; percentage; equations; lengths, areas, and volumes; the right triangle and trigonometry; averages; graphs; special applications of practical measurements; exponents; logarithms; the slide rule.

Mathematics 131. (Formerly Mathematics 20, 231.) Solid Geometry. **Three hours.**

Fundamental propositions, problems, and exercises of solid geometry.

Mathematics 232. (Formerly Mathematics 21.) Analytic Geometry. **Three hours.**

Prerequisites: Mathematics 108, 113.

Graphs and loci; polar coordinates; straight line; circle; conic sections; general equation of the second degree; elements of solid analytic geometry.

Mathematics 251. (Formerly Mathematics 22 and 23.) Differential Calculus. **Five hours.**

Prerequisite: Mathematics 232.

Variables; functions; differentiation; applications of the derivative; successive differentiation; parametric and polar equations and roots; differen-

tials: curvature; theorem of mean value and its applications; series; expansions of functions; partial differentiation; integration by elementary forms.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Mathematics 321. (Formerly Mathematics 30.) General Astronomy. **Three hours.**

Development of astronomy as a science; development of the solar system; astronomical instruments; better known facts of astronomy.

Mathematics 334. (Formerly Mathematics 34.) College Geometry. **Three hours.**

Prerequisite: Mathematics 232.

Geometric constructions; properties of the triangle; transversals; harmonic properties of circles.

Mathematics 352. (Formerly Mathematics 32.) Integral Calculus. **Three hours.**

Prerequisite: Mathematics 251.

Integration; constant of integration; definite integral; integration as a process of summation; centroids; fluid pressure; other applications and multiple integrals.

Mathematics 407. (Formerly Mathematics 33.) Theory of Equations. **Three hours.**

Prerequisite: Mathematics 251 or enrollment in Mathematics 251.

Graphs; complex numbers; cubic equations; quartic equations; determinants and symmetric functions.

Mathematics 453. (Formerly Mathematics 41.) Differential Equations. **Three hours.**

Prerequisite: Mathematics 352.

Differential equations of the first order; applications; singular solutions; linear equations with constant coefficients; miscellaneous methods for solving equations of higher order than the first; integration in series; total differential equations.

Mathematics 454. (Formerly Mathematics 42.) Advanced Calculus. **Three hours.**

Prerequisite: Mathematics 352.

Indeterminate forms; power series; partial differentiation; implicit functions and applications to geometry.

Mathematics 455. Theoretical Mechanics. **Three hours.**

Same as Physics 455.

Mathematics 467. (Formerly Mathematics 46.) Teaching of High School Mathematics. **Three hours.**

Prerequisite: Ten hours of college mathematics or consent of Head of the Department.

Aims of high school mathematics; importance of high school mathematics; history of mathematics; problems of teaching applied to mathematics; methods of teaching algebra, plane and solid geometry, trigonometry, and high school arithmetic, selection of problems; types of examinations and their importance; class instruction as applied to mathematics; importance of assignment and methods of study.

ROTC

MILITARY SCIENCE AND TACTICS

The primary mission of the Reserve Officers Training Corps is to produce junior officers who have the qualities and attributes essential to their progressive continued development as officers in the Army of the United States.

The secondary mission is to give educational training, which through the years, has been found distinctly valuable by college students who have taken the course.

As an essential element of military training, certain details of conduct are stressed, in order that, upon completion of his training, the student may be well disciplined in mind and body. The particular methods employed by the military department are but a means to an end. The basic aim is to cultivate in each student habits of cheerful and unquestioning response to proper authority, loyalty, patriotism, self-control, precision, and alertness. These qualities, together with professional knowledge and experience in command, develop leadership and personality, both valuable in peace and war.

The Federal Government supports military training (ROTC) by providing uniforms or their money equivalent; by detailing instructors and maintenance personnel from the Regular Army; by furnishing army equipment; and in the case of advanced students, by monthly money payments determined annually. ROTC training is given by the College under the regulations and supervision of the Department of the Army. Credit towards graduation is allowed as for other college courses.

ROTC training contemplates four years of work. The complete course is divided into two parts; the BASIC course and the ADVANCED course, each of four semesters duration. Having enrolled in either course, a student will be required to complete the course, unless he is released by proper authority or leaves school.

To be eligible for enrollment in the ROTC, students must be citizens of the United States and must pass a physical examination. Special recognition for service in the armed forces is given to veterans of World War II. To students who have had over six months but less than one year of military service, credit may be given for the first year basic course, in which case, the student is eligible for enrollment in the second year basic course. Students having had one year or more of service may be credited with the entire two-year basic course, in which case they will be eligible for enrollment in the first year advanced course.

Enrollment for the basic course is voluntary and does not in itself obligate the student for active military service. Upon completion of the course the student will receive a certification of the training received.

Enrollment for the Advanced Course is voluntary. By so enrolling, the student obligates himself upon completion of the course to accept a commission as a Second Lieutenant of Artillery in the Officers Reserve Corps.

Draft Deferment—Deferment of induction under the selective service act of 1948 may be accorded ROTC students who meet certain specific requirements under current regulations. Such deferment does not relieve the individual from the necessity of registering with the local draft board.

Allowances and Cost—Students enrolling in the basic course receive no cash allowance but are issued a uniform for their personal wear. A deposit of five (5) dollars is required on these items to cover possible loss or damage not due to ordinary wear and tear. The deposit is returned to students at the end of the school term or upon return of the articles of uniform.

A student who enrolls in the advanced course receives a daily subsistence allowance (approximately $0.90 per day) for the duration of his enrollment in the course, exclusive of the camp period, amounting to about $500.00. An officers' type uniform, complete with overcoat, shoes, shirts and cap, is furnished free of cost to each of these students on a loan basis.

Between the first and second year advanced course the student is required to attend a training camp of approximately six weeks duration. He receives travel pay from his home or school to camp and return, at the rate of five cents per mile. He is given free medical attention, fed, clothed, and, in addition, is paid at the rate of seventy-five (75) dollars per month while there. During the camp the student puts into practice what he has learned during his instruction in the school ROTC unit. Any emoluments mentioned above are in addition to benefits received through the "G. I. Bill of Rights."

MILITARY SCIENCE

LOWER DIVISION COURSES

Military Science 101. Introduction to Military Science. **Two hours.**
National Defense Act and ROTC; military organization; maps and aerial photographs; leadership, drill and exercise of command.

Military Science 101a. Basic course in Military Band. **Two hours.**

Military Science 102. Basic Military Training. **Two hours.**
Prerequisite: Military Science 101.
Hygiene and first aid; individual weapons and marksmanship; leadership, drill and exercise of command.

Military Science 102a. Basic course in Military Band. **Two hours.**
Prerequisite: Military Science 101a.

Military Science 201. Basic Military Training. **Two hours.**
Prerequisite: Military Science 102.
Physical development methods; military administration; military law and boards; leadership, drill and exercise of command.

Military Science 201a. Basic Course in Military Band. **Two hours.**
Prerequisite: Military Science 102a.

Military Science 202. Basic Military Training. **Two hours.**
Prerequisite: Military Science 201.
Evolution of warfare; maps and aerial photographs; leadership, drill and exercise of command.

Military Science 202a. Basic course in Military Band. **Two hours.**
Prerequisite: Military Science 201a.

UPPER DIVISION COURSES

(Open to students who have completed the Basic Course and to veterans with at least twelve months of military service.)

Military Science 301. First Year Advanced Military Training. **Four hours.**
Prerequisites: Basic courses or in case of veterans, at least twelve months of military service.
Geographical foundations of national power; military leadership, psychology, and personnel management; military law and boards; artillery tactics and technique; leadership, drill and exercise of command.

Military Science 302. First Year Advanced Military Training. **Four hours.**
Prerequisite: Military Science 301.
Artillery tactics and technique; leadership, drill and exercise of command.

Military Science 401. Second Year Advanced Military Training. **Four hours.**
Prerequisite: Military Science 302.
Command and staff; psychological warfare; military problems of the U.S.; military mobilization and demobilization; combat intelligence; military teaching methods; artillery tactics and technique; leadership, drill and exercise of command.

Military Science 402. Second Year Advanced Military Training. **Four hours.**
Prerequisite: Military Science 401.
Artillery tactics and technique; leadership, drill and exercise of command.

MUSIC

Before selecting the field of music for special or major concentration, the student will consult with the head of the department. Because the training of a music teacher requires a better musical background, together with more knowledge and skill, than may be acquired during the normal four years of college, students who select music as a major should have had some pre-college music training and certain natural aptitudes. It is highly desirable that a student be fairly proficient pianist before coming to college. However, proficiency on some other instrument may have an equivalent value.

The requirements for ensemble participation are the same for all areas and majors in music, both professional and non-professional degrees. The student should, during his first semester in college, make plans with the head of the department for the proper satisfaction of this requirement.

Students who are taking Applied Music for credit will be expected to attend a specified number of recitals and concerts. Unless this condition is met, credit will not be given. In advance of performing publicly, students are expected to consult their teachers of Applied Music.

MUSIC

(Recommended curriculum in the area of Music with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
History 141	3	History 142	3
Music 112	2	Library Science 166	1
Music 150	2	Music 112	2
Music 180	2	Music 151	2
Music 181	2	Music 182	2
Music 191	2	Music 192	2
Physical Education 110	½	Physical Education 110	½
Sociology 100 (Women)	1	Elective	2
	17½		17½

Second Year

English 211	3	English 212	3
Music 122	2	Music 122	2
Music 130	1	Music 131	1
Music 171	3	Music 282	2
Music 281	2	Music 292	2
Music 291	2	Physical Education 110	½
Physical Education 110	½	Science 110 or 112	3
Science 109 or 111	3	Elective	3
	16½		16½

Third Year

Education 211	3	Health 201	3
Music 363	2	Music 364	2
Music 371	2	Music 372	2
Music 381	2	Music 382	2
Music, Applied Elective	2	Music 383	2
Physical Education 225	2	Music, Applied Elective	2
Elective	3	Elective	3
	16		16

Fourth Year

Education 383	3	Education 364	6
Music 366	2	Education 463	10
Music 380	2		
Elective	9		
	16		16

The sequence of applied music courses is suggestive only and is subject to modification upon recommendation by the head of the department, by reason of the background ability or major interest of the student.

Music 363 and 364 may be offered in alternate years with 380 and 366.

Summary of Music Recommendations for Area with Right of Certification

	Hours		Hours
Music 180, Elements of Music	2	Music 371-372, Music History I-II	4
Music 181-182, Beginning Harmony I-II	4	Music 366, Conducting	2
Music 191-192, Beginning Sight Singing and Ear Training I-II	4	Music 363, Grade Methods and Materials	2
Music 281-282, Advanced Harmony I-II	4	[1]Music 364, High School Music	2
Music 291-292, Advanced Sight Singing and Ear Training I-II	4	[2]Music 112, Piano	4
Music 380, Form and Analysis	2	Music 122, Voice	4
Music 383, Orchestration	2	Music, Applied Elective	4
Music 171, Enjoyment of Music	3	Music 150, 151, Band Instrument Class I-II	4
		Music 130-131, String Class I-II	2
		[3]Ensemble	6-9
			59-62

Optional Fields of Ensemble Participation

These requirements are the same for graduation with right of teaching certificate and without right of teaching certificate, both for the major and for the area. Every music major shall, upon consultation with his faculty advisor and with the head of the department, select one of the following fields of ensemble participation. Such participation must begin with the first semester of the freshman year unless other arrangements are approved by advisors. In order to discharge the requirements for ensemble participation, only consecutive semesters shall be considered as constituting a year. This statement represents only the minimum requirement for music majors; more extensive participation is advised for the sake of the musical and professional growth of the individual. Except in Music 121 (Choir), credit in ensemble shall be given only for semesters which are consecutive.

Voice

4 years Choir/Glee club
1 year Piano (4 hrs.) in addition to 4 hours required in general curriculum, making a total requirement of 8 hours of piano.

5 years Total

Piano

2 years Choir
2 years Accompanying
1 year Elective (Choir/Orchestra/Band/Accompanying.)

5 years Total

Orchestra

4 years Orchestra
1 year Choir

5 years Total

Band

5 years Band/Orchestra, of which 4 years must be Band
1 year Choir

6 years Total

[1] Students whose principal interest is in piano and who select the piano field of ensemble participation may substitute Music 361 (Teaching Repertory) and 364 (Teaching Piano in Classes) for Orchestration and for High School Music. If only one substitution is made, Orchestration will be the course to be dropped.

[2] The student may find it necessary to take additional piano lessons in order to fulfill to the satisfaction of the faculty the requirements for the State Council of Higher Education that a student must have "enough piano to insure competency to play simple accompaniments and materials such as are found in the Golden Book."

[3] See Ensemble requirements.

MUSIC FEES

Class Instruction

Music 130, 131, 151, 152 ..... $ 5.00

Individual Instruction

Piano, Voice, Violin, Organ, Violoncello, Wind Instruments

Two lessons per week, one semester 27.00

One lesson per week, one semester 18.00

Practice room with piano, one hour daily, one semester.... 5.00

Use of college-owned violin, one semester 3.00

Summary of Music Recommendations for Area Without Certification

	Hours		Hours
Music 130, Elements of Music	2	Music 380, Form and Analysis	2
Music 181-182, Beginning Harmony I-II	4	Music 171, Enjoyment of Music	3
Music 191-192, Beginning Sight Singing and Ear Training I-II	4	Music 371-372, History of Music I-II	4
Music 281-282, Advanced Harmony I-II	4	Music 361 or 362, Teaching Repertory (Piano or Voice)	1
Music 291-292, Advanced Sight Singing and Ear Training I-II	4	[1]Music, Applied Elective	16
		Ensemble	6-9
			55-58

Major in Music

The following courses are recommended for a major in Music with right of teaching certificate:

	Hours		Hours
Music 130, Elements of Music	2	Music 363, Grade Methods and Materials	2
Music 181-182, Beginning Harmony I-II	4	[2]Music, Applied Elective	5
Music 191-192, Beginning Sight Singing and Ear Training I-II	4	[3]Music 130-131, String Class I-II	2
Music 171, Enjoyment of Music	3	or	
[1]Music 366, Conducting	2	[3]Music 150-151, Band Instrument Class I-II	4
			24-26

The following courses are recommended for a major in Music without right of teaching certificate:

	Hours		Hours
Music 130, Elements of Music	2	Music 171, Enjoyment of Music	3
Music 181-182, Beginning Harmony I-II	4	Music 371-372, History of Music I-II	4
Music 191-192, Beginning Sight Singing and Ear Training I-II	4	[4]Applied Music	8
			25

See Ensemble requirements.

[1] Students whose principal musical interest is in piano and who elect the piano field for their ensemble participation may substitute **Teaching Repertory** for **Conducting.**

[2] Five hours, to be taken in one or more fields, upon recommendation of advisor.

[3] After consultation with student, the advisor will recommend Music 130-131, or Music 150-151.

[4] It is recommended that the 8 hours of applied music credit in this curriculum be distributed evenly throughout the 8 semesters. The credit shall be earned in a single field of applied music unless the teacher concerned and the head of the department recommend otherwise.

Minor in Music

A student may elect a minor in Music. Courses for the minor must be approved by the Head of the Department of Music.

MUSIC

LOWER DIVISION COURSES

*Music 11. (Formerly Music 1a, b, c.) Piano. **No credit.**
See music fees.
Introductory course for the non-musician preparatory to Music 112.

*Music 12. (Formerly Music 2a, b, c.) Voice. **No credit.**
See music fees.
Introductory course for the non-musician preparatory to Music 122.

*Music 13a. (Formerly Music 3a, b, c.) Violin. **No credit.**
See music fees.
An introductory course to prepare the student to enter Music 132.

*Music 13b. (Formerly Music 4a, b, c.) Violoncello. **No credit.**
See music fees.

*Music 15. (Formerly Music 6a, b, c.) Wind Instruments. **No credit.**
See music fees.
Introductory course for those who wish to learn to play any of the woodwind or brass instruments.

*Music 112. (Formerly Music 11a-0.) Piano. **Two hours.**
See music fees.
Two lessons per week, with approximately six hours of practice and study per week.

Music 120. (Formerly Music 20.) Chorus. **One hour.**
To encourage and foster a knowledge of and a desire to participate in choral singing; to teach part singing; to familiarize students with standard community and folk songs and with the more familiar choral works and simpler modern works for mixed chorus; to acquaint prospective teachers with desirable high school choral material; to illustrate ideals of choral singing and methods of attaining them.

Music 121. (Formerly Music 20a.) Choir. **One hour.**
The College Choir is open to all college students who qualify. The organization aims to develop and perpetuate a high standard of choral-ensemble singing. Each year the Choir makes a number of appearances on the campus and before high schools and other organizations. It also assists in the presentation of the Messiah, Baccalaureate, and other programs. Membership in the Choir will include attendance at rehearsals for these programs.

*Music 122. (Formerly Music 12a-1.) Voice. **Two hours.**
See music fees.

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* Music 11, 12, 13a, 13b, 15, and the first four semesters of Music 112, 122, 132, and 152 may be individual instruction or instruction in small groups, at the discretion of the instructor and the head of the department.

Music 130 and 131. (Formerly Music 10a, b, c.) String Class. **One hour.**
To provide for the beginner who wishes to learn to play a string instrument an opportunity to study under the stimulus of class instruction; to start the beginner on the road toward sufficient playing and technical ability to teach strings in class and to train the string section of a school orchestra.
The first semester and part of the second are devoted to the study of one particular instrument. The second semester devotes some attention to the string instruments which are not studied in class.

***Music 132.** (Formerly Music 13a-1.) Violin. **Two hours.**
See music fees.

***Music 136.** (Formerly Music 14a-f.) Violoncello. **Two hours.**
See music fees.

***Music 142.** (Formerly Music 15a-1.) Organ. **Two hours.**
Prerequisite: Four years of piano study.
See music fees.

Music 150. (Formerly Music 16a. Band Instrument Class I. **Two hours.**
See music fees.
A class in woodwind instruments, with some attention to percussion. Practical instruction in methods of tone production, tuning, fingering, and care of the instruments; group instruction, involving handling and playing of the woodwind instruments of the band and orchestra; the examination of materials suitable for beginning bands. This course will give the student some practical experience in elementary conducting.

Music 151. (Formerly Music 16b.) Band Instrument Class II. **Two hours.**
See music fees.
A class in brass instruments, with some attention to percussion similar to Music 150.

***Music 152.** Wind Instrument. **Two hours.**
See music fees.

Music 171. (Formerly Music 27.) The Enjoyment of Music. **Three hours.**
The most interesting music from all periods and styles. Besides the regular library of recorded music, there is available for this course the Carnegie Music Set, including reproducing machine and record library. Open to all students, with additional assignments to be asked of students majoring in music.

Music 180. (Formerly Music 18.) Elements of Music. **Two hours.**
Staff notation, notes, rests, clefs, scales, (various modes), keys, meter, chromatic tones, intervals, chords, cadences, abbreviations, and other symbols; music terms; elements of form; solmization; music writing and simple dictation.

Music 181. (Formerly Music 28a.) Beginning Harmony I. **Two hours.**
Four voice part writing based on primary triads; the dominant seventh melodic passing tones and embellishments; keyboard work consisting of scales, triads, etc.

Music 182. (Formerly Music 28b-c.) Beginning Harmony II. **Two hours.**
Prerequisite: Music 181.
Continuation of first term harmony; use of secondary triads and inversions in major and minor keys; harmonizations with figured bass and given soprano;

* Music 11, 12, 13a, 13b, 15, and the first four semesters of Music 112, 122, 132, and 152 may be individual instruction or instruction in small groups, at the discretion of the instructor and the head of the department.

original composition in simple forms; keyboard work with cadences and elementary harmonization; secondary chords of the seventh; modulation to nearly related keys; continuation of keyboard and original work.

Music 191. (Formerly Music 29a.) Beginning Sight Singing and Ear Training I. **Two hours.**

Sight singing of melodic exercises in major and minor keys and in various rhythms; tone group, and verbal and tonal dictation; interval drill.

Music 192. (Formerly Music 29b-c.) Beginning Sight Singing and Ear Training II. **Two hours.**

Prerequisite: Music 191.

***Music 210.** Band. **One-half hour.**

***Music 220.** Orchestra. **One-half hour.**

***Music 230.** Girls' Glee Club. **One-half hour.**

***Music 240.** Men's Glee Club. **One-half hour.**

Music 260. (Formerly Music 25a-b.) Public School Music. **Three hours.**

Such knowledge of music theory and of the principles of notation as it is needed by the grade teacher; the aims of music in the grades; the child voice; tone quality; the unmusical singer; rythmic development; use of the pitch pipe; rote songs; use of the phonograph in teaching songs, together with increasing ability in music reading on the part of the student.

Music 281. (Formerly Music 38a.) Advanced Harmony I. **Two hours.**

Prerequisite: Music 182.

Extraneous modulation; secondary chords of the seventh; analysis of sonatas of Haydn and Mozart; study of melodic and harmonic development; chords of the Neopolitan sixth; augmented sixth.

Music 282. (Formerly Music 38b-c.) Advanced Harmony II. **Two hours.**

Modulation through use of the diminished seventh chord; analysis and memorizing a Bach choral; writing a sonata, allegro form.

Music 291. (Formerly 39a.) Advanced Sight Singing and Ear Training I. **Two hours.**

Music 292. (Formerly Music 39b-c.) Advanced Sight Singing and Ear Training II. **Two hours.**

Prerequisite: Music 291.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Music 361. Teaching Repertory, Piano. **One hour.**

This course is designed to widen the student's acquaintance with piano literature, to give him a repertoire of teaching material, a knowledge of teaching procedures. A note book containing notes on methods of attacking technical problems, lists of teaching materials for various grades, etc., is required.

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* Consecutive semesters in this course will be required for credit; any two consecutive semesters will earn one hour of credit. Admission to membership upon approval of instructor.

Music 362. Teaching Repertory, Voice. **One hour.**

This course is designed to widen the student's acquaintance with voice literature, to give him a repertoire of teaching material, and a knowledge of teaching procedures. A note book containing notes on methods of attacking technical problems, lists of teaching materials for various grades, etc., is required.

Music 363. (Formerly Music 41a.) Grade Methods and Materials. **Two hours.**

Prerequisites: Music 260 or 180 or the equivalent.

A course in the teaching and supervision of music in the grades, designed primarily for music majors.

Music 364. (Formerly Music 41b.) High School Music. **Two hours.**

A course in the teaching and administration of high school music, designed primarily for music majors.

Music 366. (Formerly Music 42.) Conducting. **Two hours.**

Prerequisites: Musical training and experience adequate to the comprehension and manipulation of the subject matter of this course.

Technique of the baton; tempo; attach; release; phrasing; dynamics; seating of the chorus and orchestra; discipline of rehearsals; community music.

Music 371. (Formerly Music 37a.) Music History I. **Two hours.**

Archaic and medieval music; organization of church music; music of the Renaissance and Reformation; music of Elizabethan England; early classical composers; Bach, Handel, Haydn, and Mozart, the early Beethoven.

This course and Music 372 are organized primarily for music majors. Because of the background required for this course, non-music majors will be admitted only upon recommendation of the head of the department.

Music 372. (Formerly Music 37b-c.) Music History II. **Two hours.**

Romanticism in music; the Romantic opera; development of piano music; the art song: late Romantic and national trends in music; modern music; Impressionism; atonality; Beethoven; Schubert; Schumann; Chopin; Liszt; Wagner: Debussy: Ravel; Hindemith; Stravinsky; jazz influence in American music; Harris; Gershwin, etc.

Music 380. Form and Analysis. **Two hours.**

***Music 381.** Counterpoint I. **Two hours.**

***Music 382.** Counterpoint II. **Two hours.**

***Music 383.** Orchestration. **Two hours.**

Music 461. (Formerly Music 44a.) Band and Orchestra Procedures and Materials I. **Two hours.**

Analysis and organization of various courses of study for instrumental groups of varying abilities; rehearsal routines; training student sectional leaders: duties which may be assumed by students; adaptation of practice quarters to fit accoustical needs; program mechanics for public appearances; publicizing and interpreting music activities; care of equipment; program and teaching materials consideration of the modified Prescott system and similar courses of study.

Music 462. (Formerly Music 44b.) Band and Orchestra Procedures and Materials II. **Two hours.**

Continuation of Music 461.

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* During semesters when Music 381, 382, 481, 482, 483 are not offered as regular classes they may be taken as individual instruction, under the same arrangements as instruction in Applied Music.

Music 463. (Formerly Music 43a, b, c) Teaching Piano in Classes. **Two hours.**

Prerequisite: Three years of piano study in college or the equivalent.

***Music 481.** Canon and Fugue I. **Two hours.**

***Music 482.** Canon and Fugue II. **Two hours.**

***Music 483.** Composition. **Two hours.**

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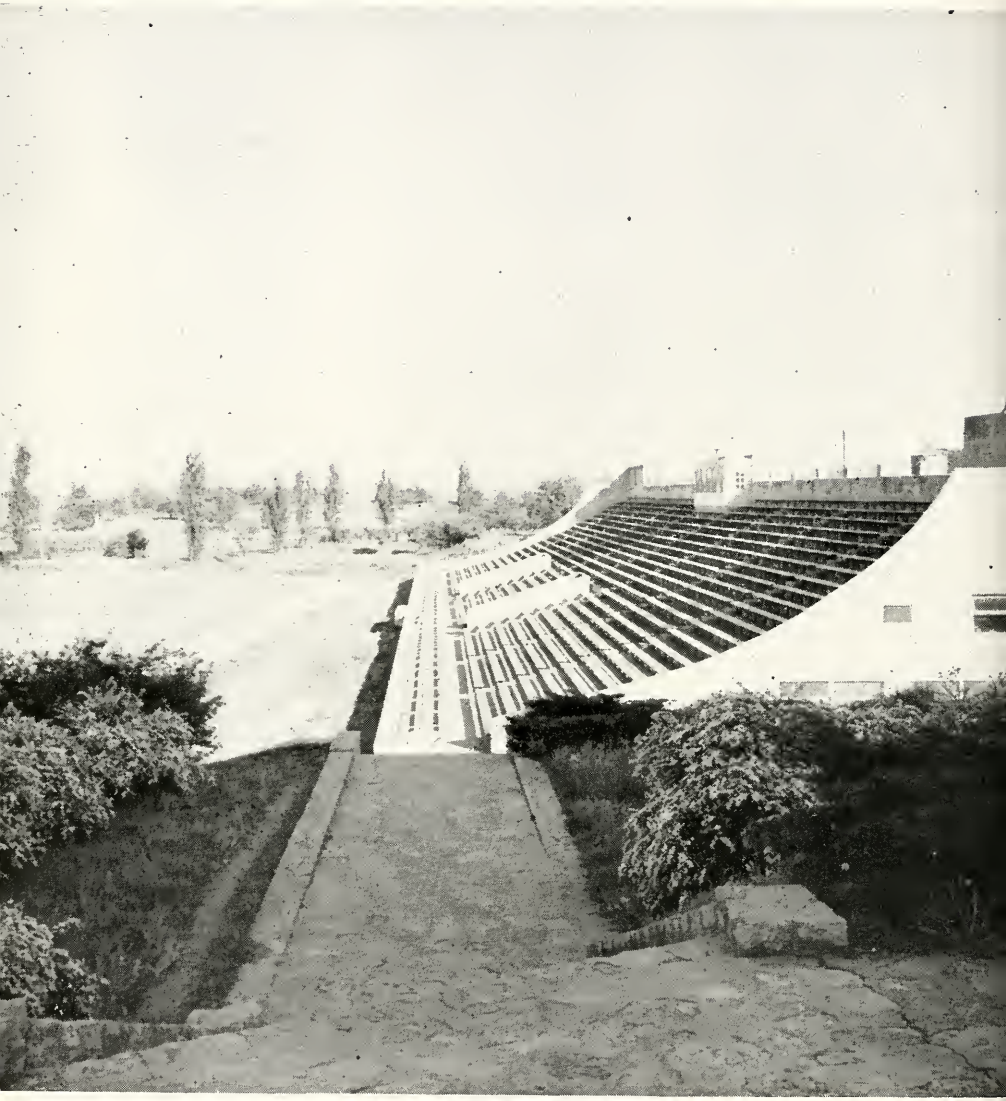
* During semesters when Music 381, 382, 481, 482, 483 are not offered as regular classes they may be taken as individual instruction, under the same arrangements as instruction in Applied Music.



HANGER STADIUM

PHYSICAL EDUCATION

LOWER DIVISION COURSES

Physical Education 110. (Formerly Physical Education 10.) Fundamental Physical Education Activities. **One-half hour.** Fee $3.25.

To promote the development of physical efficiency and skills. The course is divided into sections as indicated below:

Physical Education 110-a, Elementary Tumbling and Apparatus.

Physical Education 110-b, Elementary Swimming.

Physical Education 110-c, Fundamentals of Touch Football.

Physical Education 110-d, Fundamentals of Basketball.

Physical Education 110-e, Fundamentals of Softball.

Physical Education 110-f, Fundamentals of Volleyball.

Physical Education 110-g, Fundamentals of Tennis.

Physical Education 110-h, Fundamentals of Handball.

Physical Education 110-i, Fundamentals of Boxing and Wrestling.

Physical Education 110-j, Fundamentals of Badminton and Aerial Dart.

Physical Education 110-k, Fundamentals of Shuffleboard, Paddle Tennis, and Table Tennis.

Physical Education 110-l, Folk Dancing and Singing Games.

Physical Education 110-m, Clogging.

Physical Education 110-n, Archery.

Physical Education 110-s, Hockey.

Physical Education 125. (Formerly Physical Education 11.) Introduction to Physical Education. **One hour.**

Place of physical education in general education and American life; consideration of comparative physical education.

Physical Education 220. (Formerly Physical Education 20.) Plays and Games for the Elementary Grades. **Two hours.**

Materials, methods and practice in physical education activities suitable for children in the elementary school. Fee, $2.50.

Physical Education 225. (Formerly Physical Education 21.) Games and Sports for the Secondary School. **Two hours.**

Physical education activities suitable for junior and senior high school students. Fee, $2.50.

Physical Education 250. (Formerly Physical Education 26.) Scouting and Clubcraft. (Men.) **Two hours.**

History and principles of scouting; practical scoutcraft and clubcraft. The scoutmaster's certificate is awarded to those completing the course. Fee, $.75.

Physical Education 251. (Formerly Physical Education 25.) Clubcraft. (Women.) **Two hours.**

National girls' organizations such as Girl Scouts, Camp Fire Girls, Girl Reserves, and 4-H Clubs; leadership and organization of clubs.

Physical Education 252. (Formerly Physical Education 27.) Softball and Tennis Coaching Fundamentals for Women. **Two hours.**

Theory and practice of techniques and teaching procedures of softball and tennis for women. Also lead-up games for these sports. Fee, $2.50.

Physical Education 261. (Formerly Physical Education 24 and 265.) Coaching Baseball. **Two hours.**

Theory and practice in coaching the fundamentals of baseball; team offense and defense. Fee, $2.50.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Physical Education 300. (Formerly Physical Education 30.) Folk and National Dancing. **One hour.**

Traditional and social dances of the United States and other countries. Fee, $2.50.

Physical Education 320. (Formerly Physical Education 31.) Kinesiology. **Two hours.**

Fundamentals of body mechanics; movements of the human body.

Physical Education 325. (Formerly Physical Education 32.) Physiology of Activity. **Two hours.**

Effects of physical education activities on the various systems of the human body.

Physical Education 345. (Formerly Physical Education 35a, 35b, and 245a, 245b.) Modern Dance. **One hour.**

Modern dance and the fundamentals of movement and rhythm; dance composition. Fee, $2.50.

Physical Education 350. (Formerly Physical Education 37 and 260.) Coaching Basketball. **Two hours.**

Theory and practice in coaching the fundamentals of basketball; team offense and defense. Fee, $2.50.

Physical Education 361. (Formerly Physical Education 38.) Basketball and Volleyball Coaching for Women. **Two hours.**

Theory and practice of techniques and teaching procedures of basketball and volleyball for women; lead-up games for these sports. Fee, $2.50.

Physical Education 362. (Formerly Physical Education 39 and 265.) Coaching Track and Field. **Two hours.**

Theory and practice in coaching fundamentals involved in track and field. Fee, $2.50.

Physical Education 366. (Formerly Physical Education 36.) Materials and Methods for Teaching Physical Education. **One hour.**

Theories of play; study of existing play programs; correlation with other subjects; games, skills, lesson planning and observation.

Physical Education 367. (Formerly Physical Education 34.) Advanced Physical Training Activities. **One hour.**

Prerequisite: Physical Education 110a.

Advanced tactics; drills for demonstrations; pyramid building; tumbling; apparatus; opportunity for leadership and observation. Fee, $3.25.

Physical Education 401. (Formerly Physical Education 40.) Community Recreation. **Two hours.**

The problems of leisure; vacation time for children; adult recreation; content of school programs for leisure education; physical education; dramatics; reading; music, art and handcrafts; nature study; extracurricular activities. Fee, $2.50.

Physical Education 420. (Formerly Physical Education 42 and 260.) Coaching Football. **Two hours.**

Theory and practice in coaching the fundamentals of football; team offense and defense. Fee, $2.50.

Physical Education 468. (Formerly Physical Education 46.) Administration and Organization of Physical Education. **Two hours.**

Policies and procedures of administration on the elementary and secondary school level. Special emphasis on construction and care of facilities, equipment, and supervision of personnel.

PHYSICS

(Recommended curriculum for the training of teachers of the Sciences with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Biology 121	5	Biology 122	5
Chemistry 111	5	Chemistry 112	5
English 101	3	English 102	3
Mathematics 107	3	Library Science 166	1
Physical Education 110	½	Mathematics 113	3
Sociology 100 (Women)	1	Physical Education 110	½
	17½		17½

Second Year

Biology 229	3	Biology 325	3
English 211	3	English 212	3
History 141 or 202	3	History 142 or 203	3
Physical Education 110	½	Physical Education 110	½
Physics 201	5	Physics 202	5
Elective	3	Elective	2
	17½		16½

Third Year

Biology 335	2	Biology 345	2
Chemistry 310	5	Chemistry 212	5
Geology 201	3	Education 211	3
Physics Elective	3	Physics Elective	3
Science 471	2	Science 410	2
Elective	2	Elective	2
	17		17

Fourth Year

Education 383	3	Education 364	6
Health 201	3	Education 463	10
Physical Education 225	2		
Physics Elective	3		
Elective	6		
	17		16

Physics must be chosen by the student with the approval of the head of the department. Physics 131, 132, and 203 may be substituted for Physics 201 and 202.

PHYSICS

(Recommended curriculum for a major in Physics with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Chemistry 111	5	Chemistry 112	5
English 101	3	English 102	3
Mathematics 107	3	Library Science 166	1
Physical Education 110	½	Mathematics 113	3
Sociology 100 (Women)	1	Mathematics 108	2
Elective	4	Physical Education 110	½
		Elective	2
	16½		16½

Second Year

English 211	3	English 212	3
Mathematics 232	3	Health 201	3
Physical Education 110	½	Mathematics 251	5
Physical Education 225	2	Physical Education 110	½
Physics 107	1	Physics 202	5
Physics 201	5		
Elective	2		
	16½		16½

Third Year

Biology 121	5	Biology 122	5
Education 211	3	Education 383	3
Mathematics 352	3	Physics Elective	6
Physics Elective	3	Elective	2
Elective	2		
	16		16

Fourth Year

Education 383	3	Education 364	6
Physics Elective	6	Education 463	10
Elective	7		
	16		16

Recommended Curriculum for a Minor in Physics

A student with a major and a minor in other departments may take the following courses for a minor in Physics: Physics 107, 201, 202, and 7 hours elective.

Physics electives must be chosen by the student with the approval of the head of the department. Physics 131, 132, and 203 may be substituted for Physics 201 and 202.

PHYSICS

(Recommended curriculum for a major in Physics without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Chemistry 111	5	Chemistry 112	5
English 101	3	English 102	3
History 141	3	History 142	3
Mathematics 107	3	Library Science 166	1
Physical Education 110	½	Mathematics 108	2
Physics 107	1	Mathematics 113	3
Sociology 100 (Women)	1	Physical Education 110	½
	16½		17½

Second Year

English 211	3	English 212	3
Mathematics 232	3	Mathematics 251	5
Physical Education 110	½	Physical Education 110	½
Physics 201	5	Physics 202	5
Elective	5	Elective	3
	16½		16½

Third Year

Biology 121	5	Biology 122	5
Foreign Language	3	Foreign Language	3
Mathematics 352	3	Physics Elective	6
Physics Elective	3	Elective	2
Elective	2		
	16		16

Fourth Year

Physics Elective	6	Physics Elective	3
Elective	10	Elective	13
	16		16

PHYSICS

LOWER DIVISION COURSES

Physics 107. (Formerly Physics 17.) Slide Rule Theory and Practice. **One hour.**

Designed to aid the student in doing arithmetical computations easily and rapidly.

Physics 131. (Replaces Physics 11.) Elementary Physics. **Five hours.**

Prerequisite: One unit each of high school algebra and plane geometry.

The fundamental ideas of mechanics; molecular physics; heat. Three lecture and four laboratory hours. Fee, $1.50.

Physics 132. (Replaces Physics 12.) Elementary Physics. **Five hours.**

Prerequisite: Physics 131.

Electricity; magnetism; wave motion; sound; light. Three lecture and four laboratory hours. Fee, $1.50.

Physics 201. (Formerly Physics 20 and part of Physics 21.) Mechanics, Molecular Physics and Heat. **Five hours.**

Prerequisite: Trigonometry.

Falling bodies; Newton's laws of motion and applications to practical problems; curvilinear motion; composition and resolution of forces; the laws of equilibrium and their application to various problems; work and energy; machines; momentum; elasticity; simple harmonic motion; hydrodynamics; heat and molecular physics including thermometry, pressure, expansion of solids, liquids, and gases; modern radiation theory. Three lecture and four laboratory hours. Fee, $1.50.

Physics 202. (Formerly Physics 22 and part of Physics 21.) Electricity, Magnetism, Wave Motion, Sound, and Light. **Five hours.**

Prerequisite: Physics 201.

Electrostatics; the nature of electricity; magnetism; Ohm's law; measurement of electrical quantities; sources of electrical energy; Lenz's law; inductance and capacity; alternating currents; electric waves and radio. Three lecture and four laboratory hours. Fee, $1.50.

Physics 203. (Formerly Physics 23.) Problems in General Physics. **Three hours.**

Prerequisites: Physics 201, 202, or equivalent.

Problems selected from topics in Physics 201 and 202. Three recitation hours.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Physics 300. (Formerly Physics 30.) Modern Physics. **Three hours.**

Prerequisites: Physics 201, Physics 202 or equivalent, Mathematics 251 or registration in Mathematics 251.

Historical introduction; alternating currents; electromagnetic theory of radiation; properties of moving charged bodies; the electron; kinetic theory of gases; thermionics; the photoelectric effect; x-rays and their applications. Three recitation hours.

Physics 301. (Formerly Physics 31.) Modern Physics. **Three hours.**
Prerequisite: Physics 300.
Bohr theory of spectra; periodic law and atomic structure; critical potentials; radio and television; radioactivity and isotopes; geophysics; astrophysics; relativity; specific heats; electrical resistance; high frequency sound waves; and recent development in physics. Three recitation hours.

Physics 302. (Formerly Physics 32.) Introduction to Physical Optics. **Three hours.**
Prerequisites: Physics 201 and 202, or equivalent.
Wave motion; reflection and refraction; further study of lenses; the telescope; dispersion; facts concerning the spectrum; interference; diffraction; plane polarized light; the electromagnetic theory of light; the quantum theory; origin of spectra. Three recitation hours.

Physics 303. (Formerly Physics 33.) Heat. **Three hours.**
Prerequisites: Physics 201 and 202, or equivalent.
Historical review of theories and discoveries; thermometry; specific heats; thermal expansion; transfer of heat; first law of thermodynamics; radiation; change of state; continuity of state; introduction to thermodynamics; production of low temperatures; production of high temperatures. Three recitation hours.

Physics 304. (Formerly Physics 34.) Advanced Electricity and Magnetism. **Three hours.**
Prerequisites: Physics 201 and 202, or equivalent, and Mathematics 251.
Magnetism; the electric current; electrostatics; electrolysis; thermoelectricity; electromagnetics; alternating currents; electromagnetic radiation; conduction in gases; electrons and atoms. Three recitation hours.

Physics 307. (Formerly Physics 36.) Electronics. **Three hours.**
Prerequisite: Physics 202 or equivalent.
Theory of thermionic tubes; amplifier circuit principles; photosensitive devices; rectifiers; principles of radio, radar and television. Three recitation hours. Fee, $1.50.

Physics 310. Special Problems in Physics. **One to three hours.**
Prerequisite: Physics 202 or equivalent.
Working out of special laboratory experiments; development of new equipment; or solution of special mathematical problems related to physics.

Physics 311. Special Problems in Physics. **One to three hours.**
This course is a continuation of Physics 310.

Physics 455. (Formerly Physics 301, also listed now as Mathematics 455.) Theoretical Mechanics. **Three hours.**
May be taken either in the Mathematics or Physics Department.
Prerequisites: Mathematics 352 or registration in Mathematics 352, and Physics 201 or 202.
Elemental concepts of mechanics: rectilinear motion of a particle; curvilinear motion; particle dynamics from the point of view of energy; statics of a particle; statics of a rigid body; dynamics of a rigid body; constrained motion; oscillations; motion of aggregates of particles; deformable bodies and wave motion; mechanics of fluids.

PSYCHOLOGY

Psychology 211. General Psychology. **Three hours.**

Preview of psychology; factors in development; motivation; emotions; learning; the management of learning; thinking; personality and individual differences; intelligence; vocational and employment psychology; getting along with people; psychology and social problems.

Psychology 212. Applied Psychology. **Three hours.**

A study of psychological factors in occupational choices and of applications in fields such as advertising, industry, law, medicine, and personnel work.

Psychology 308. Abnormal Psychology. **Three hours.**

A study of the nature, causes, and prevalence of disorders of sensory and motor activities, memory, emotions, intelligence, and personality.

ROARK SCIENCE BUILDING

NONSPECIALIZED SCIENCE

LOWER DIVISION COURSES

(Science 109 or 110 are not open to students who have completed laboratory courses in Physics and Chemistry. Science 111 and 112 are not open to students who have completed laboratory courses in biological sciences.)

Science 109. (Formerly Science 12 and 110.) Physical Science I. **Three hours.**

The purpose of this course is to present the field of the physical sciences, their nature and interpretation. It deals with the important topics in physics, chemistry, geology, and related subjects. Fee, $1.00.

Science 110. (Formerly Science 10 and 110.) Physical Science II. **Three hours.**

A continuation of Science 109. Fee, $1.00.

Science 111. (Formerly Science 11 and Biology 14a.) Biological Science I. **Three hours.**

A general education course. The principles of biology as they apply to man; the maintenance, adaptation and perpetuation of his body; the history and development of man and his races; interrelationships of man and other organisms; effect of man and other organisms on community life. Two lecture and two laboratory hours. Fee, $1.00.

Science 112. (Formerly Biology 14b.) Biological Science II. **Three hours.**

A continuation of Science 111. Two lecture and two laboratory hours. Fee, $1.00.

Science 261. (Formerly Biology 26.) Nature Study I. **Two hours.**

Prerequisite: A major in elementary education.

Methods in teaching nature study and general science in grades one to six; the fundamental life processes, identification and economic importance of the common animal and plant life; studies of the earth and sky, including soil, rocks, weather, clouds, stars, constellations and physical phenomena; conservation. Four laboratory hours. Fee, $1.00.

Science 262. (Formerly Biology 26.) Nature Study II. **Two hours.**

Prerequisite: Science 261.

A continuation of Science 261. Four laboratory hours. Fee, $1.00.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Science 310. (Formerly Science 35.) History of Science. **Three hours.**

The development of scientific concepts through the ages; contribution of science to civilization; relations of scientific developments and various philosophies; biographical sketches. Three lecture hours.

Science 410. Teaching of Physical Science in the High School. **Two hours.**

Prerequisite: A major in Physical Science.

Selection of textbooks, workbooks, manuals, etc.; organization of laboratory space and purchasing of materials and equipment; making simple equipment; securing free and inexpensive materials; preparation and

presentation of work units; visual aids; demonstrations; test construction and administration; club-work; specimen collection and preservation; observation in Model High School. Two lecture hours.

Science 471. (Formerly Biology 51.) Methods in Biology. **Two hours.**
Prerequisite: A major or minor in Biology.
Required of applicants for student teaching in Biology.
The sources, preparation, culture and use of biological materials for instruction in high schools; the construction, care and use of high school biological equipment; conduction of field trips. Four laboratory hours.

GENERAL SOCIAL SCIENCE

Social Science 100. An Introduction to the Social Sciences. **Three hours.** A consideration of contemporary social problems.

Social Science 101. An Introduction to the Social Sciences. **Three hours.** A continuation of Social Science 100.

SOCIOLOGY

LOWER DIVISION COURSES

Sociology 100. (Formerly Sociology 10.) College Orientation. **One hour.**
The college and its functions; living in college; the development of efficient study habits; personal and family responsibilities; social relationships; vocational guidance.

Sociology 200. (Formerly Sociology 20.) Social Understanding. **Three hours.**
The meaning of "social understandings"; the community and the community process; community surveys; the study of specific social problems, groups, and institutions as they relate to the community process.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Sociology 331. (Formerly Sociology 30.) Principles of Sociology. **Three hours.**
Field of sociology and its relation to other social science courses; relation of living conditions to life; the problem of finding and using leaders; social achievements; man's relation to his institutions and his responsibility for them; the family; religion; and morals.

Sociology 332. (Formerly Sociology 31.) Current Social Problems. **Three hours.**
The social and institutional impact of industrialism and secularism; economic, social, and biological problems in modern society; social wreckage.

Sociology 333. (Formerly Sociology 33.) Criminology, Penology and Reform. **Three hours.**
Causes of crime; heredity and environment; costs of crime; punishment and correction of criminals; special attention to juvenile delinquents and correctional methods.

SPANISH

A student with a major and a minor in other departments may take 18 semester hours for a minor in Spanish.

LOWER DIVISION COURSES

Spanish 101. (Formerly Spanish 11.) Elementary Spanish. **Three hours.**
Grammar; pronunciation; reading of easy Spanish.

Spanish 102. (Formerly Spanish 12.) Elementary Spanish. **Three hours.**
Prerequisite: Spanish 101 or one unit of high school Spanish.
A continuation of Spanish 101.

Spanish 201. (Formerly Spanish 21.) Intermediate Spanish. **Three hours.**
Prerequisites: Spanish 101 and 102, or two units of high school Spanish.
Review of grammar; intensive work on studies of Spanish speaking countries as a basis for spoken Spanish.

Spanish 202. (Formerly Spanish 22.) Intermediate Spanish. **Three hours.**
Prerequisite: Spanish 201 or three units of high school Spanish.
Foundation work for advanced study in literature and intensive study of spoken Spanish.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Spanish 301. (Formerly Spanish 31.) The Spanish Novel. **Three hours.**
Prerequisite: Two years of college Spanish or the equivalent.
Reading of selected novels of the Golden Age and of the eighteenth century.

Spanish 302. (Formerly Spanish 32.) The Spanish Novel. **Three hours.**
Prerequisite: Spanish 301 or its equivalent.
Novels of the nineteenth and twentieth centuries.

Spanish 401. (Formerly Spanish 41.) Spanish Poetry. **Three hours.**
Prerequisite: Two years of college Spanish or the equivalent.
Selected poems by writers throughout the world using the Spanish medium.

Spanish 402. (Formerly Spanish 42.) Spanish Drama. **Three hours.**
Prerequisite: Spanish 401 or its equivalent.
Representative plays of the various schools of drama.

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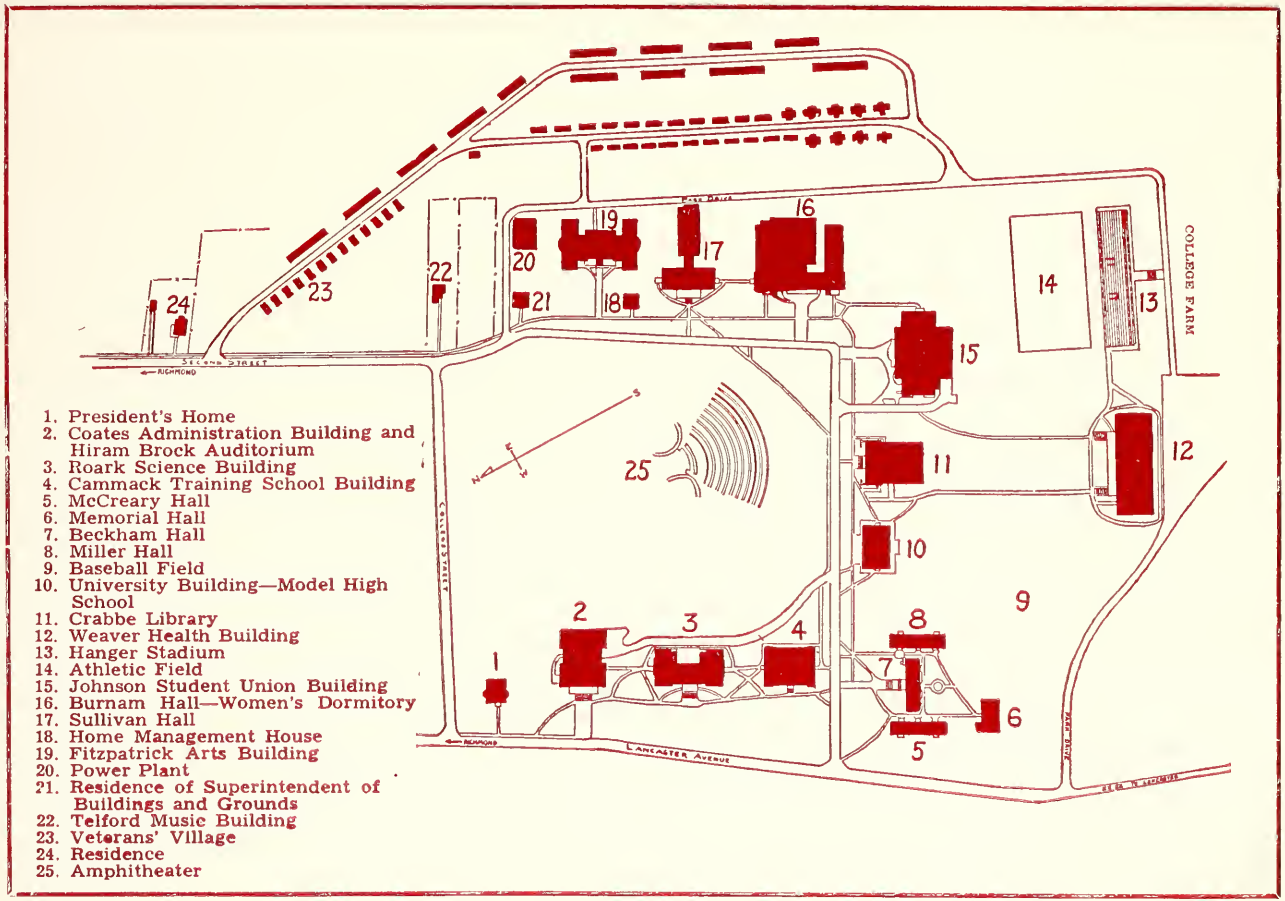
1. President's Home
2. Coates Administration Building and Hiram Brock Auditorium
3. Roark Science Building
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5. McCreary Hall
6. Memorial Hall
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8. Miller Hall
9. Baseball Field
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15. Johnson Student Union Building
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17. Sullivan Hall
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19. Fitzpatrick Arts Building
20. Power Plant
21. Residence of Superintendent of Buildings and Grounds
22. Telford Music Building
23. Veterans' Village
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25. Amphitheater
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LANCASTER AVENUE
SECOND STREET
RICHMOND

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